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ABSTRACT

The job relevance of the National Board for Certified Counselors Examination (NBCCE) was studied through a survey of professional counselors. The results of this study are presented. The NBCCE testing program, the composition and organization of the NBCCE, and the frequency with which the NBCCE is administered are described. The NBCCE is part of a certification process to assess the professional knowledge and competence of applicants. Of the 200 multiple-choice test items that make up the NBCCE, 160 are scored and 40 are used to build an item bank for future use. To determine the practical relevance of each of the knowledge topics and knowledge of skills topics assessed by the NBCCE, a 121-item mail survey was sent to certified counselors who had taken the examination between its inception in January of 1983 and September of 1985. The sample included 739 counselors. A total of 537 counselors (72.4% of the sample) responded to the survey. Subjects' responses were coded on a five-point scale (crucial, important, of questionable relevance, not relevant, or do not know). The majority of the subjects judged the examination as job relevant, with almost three fourths considering the knowledge tested either crucial or important. This report also highlights relevance judgments according to: (1) specialty areas of practice; (2) various college majors; and (3) various racial or ethnic groups. Study data are provided in 47 tables and 133 graphs. The mail survey is included. (SLD)

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A NATIONWIDE ASSESSMENT OF THE PERCEIVED JOB RELEVANCE OF THE NATIONAL BOARD FOR CERTIFIED COUNSELORS EXAMINATION

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November 28, 1986

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And finally, we gratefully acknowledge the invaluable contributions of the 537 National Certified Counselors who responded to the survey. This report represents a summary of their thoughtful responses to a complex set of questions.

Of course, we bear sole responsibility for any flaws and inaccuracies that might have escaped the watchful eyes of those who provided a great deal of assistance in conducting this study and preparing this report.

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Chapter I

Background and Introduction

This report contains the results of an assessment of the job relevance of the National Board for Certified Counselors Examination. The report is divided into three chapters, including this one. In this chapter we briefly review the NBCC Examination and the testing program of which it is a part, including the purpose of the testing program, the composition and organization of the NBCC Examination, and the frequency with which the Examination is administered. In addition, we comment briefly on the purpose and nature of this study.

Chapter II, entitled "Methodology," contains a complete description of the methods used to conduct this study. We include a listing of the research questions that the study sought to answer, a description of the questionnaire that was used to secure information on the job relevance of the Examination, a description of the population of counselors that was sampled, a discussion of the sampling procedures that were used, a description of mailout and follow-up procedures, and a description of methods that were used to reduce the data obtained to analyzable form. The methodological consequences of the design of the study are also reviewed in Chapter II. In particular, we describe the response rates obtained following each attempt to secure data, the results of analyses of sample representativeness, the consequences of slight over-representation of white non-Hispanics in the sample obtained, and the precision of estimates of the job relevance of the Examination, based on judgments of the entire sample of counselors and of significant subsamples.

Chapter III presents a tabular and graphical summary of the results of the study, and a brief discussion of the implications of these results. The four sections of Chapter III include results for the entire sample of respondents, analyses of relationships between the perceived job relevance of the Examination and counselors' areas of professional specialty, analyses of relationships between counselors' perceptions of the job relevance of the Examination and their college or university majors during their study for their highest degree, and analyses of relationships between counselors' ethnic or racial group membership and their perceptions of the job relevance of the Examination.

The Test and the Testing Program

In this section we provide a brief description of the NBCC Examination and the certification program of which it is a part. We consider the purposes of the testing program, the composition and organization of the Examination, and the frequency with which the NBCC Examination is administered.

Purpose of the Testing Program

The National Board for Certified Counselors, Inc. (NBCC) provides a certification process for professional counselors. The process is designed to evaluate the professional knowledge and competence of applicants for certification. The requirement of a period of supervised practical work experience and a supervisor's evaluation of that work provides the basis for assessment of an applicant's professional competence. Evaluation of the applicant's academic record is one element of an assessment of

professional knowledge. Another element of that assessment is the NBCC Counselor Certification Examination. According to the National Counselor Certification Examination Preliminary Technical Manual, the purpose of the Examination is "to assess each applicant's (cognitive) knowledge of counseling information and counseling skills deemed appropriate for effective counseling function" (Loesch & Vacc, 1985, p.11). The Examination is "generic in nature" so as to measure the knowledge that should have been acquired by the applicants in their various formal academic programs (Loesch & Vacc, p. 13).

Composition and Organization of the NBCC Examination

The NBCC Examination is "intended to cover knowledge of counseling information and counseling skills which should be known (at least at minimal levels) by all professional counselors" (Loesch & Vacc, p. 13). That knowledge is distributed over eight core areas:

(1) human growth and development

(2) social and cultural foundations

(3) helping relationships

(4) groups

(5) life style and career development

(6) assessment

(7) research and evaluation

and

(8) professional orientation

Each of the eight core areas is covered by one section of the Examination. Within each of the sections, the first set of

questions covers knowledge in that core area and the second set covers knowledge of skills relevant to the core area.

Test items were initially obtained by soliciting contributions of questions from all members of the American Association for Counseling and Development (AACD). Once the eight core areas had been identified, items were requested to assess all of them. A formal review process was used to reject unsuitable items and to identify other items for editing. Final versions of the items were coded to indicate the core area they represented and whether they assessed knowledge or knowledge of skills.

For the first six administrations or forms of the test, each of the eight core content areas was represented by twenty-five multiple choice test items, resulting in a total of 200 items. Beginning with the April, 1985 testing session, the NBCC Examination was composed of twenty scored items per core area, resulting in a total of 160 scored items. An additional forty items, distributed over all content areas, were included on the Examination, so as to build an item bank for future use. The minimum criterion score for test forms used after April, 1985 was based on 160 scored items. Examinees do not know which 160 of the 200 items on the test are scored. Each form of the Examination is fundamentally identical to the preceding version, except that it is composed of a unique combination of test items, some being repeated from earlier forms and others being newly selected from the available item pool.

Each item on all forms of the Examination contains an item stem and four response options. The Examination is presented in

booklet format with a custom-designed answer sheet to allow for machine scoring.

Frequency of Examination Administration

The NBCC Examination was administered six times prior to 1985: January 9, 1983; June 25, 1983; October 29, 1983; February 25, 1984; June 30, 1984; and October 27, 1984. A different form of the Examination was used for each of these administrations. Prospective certified counselors who were examined during these test administrations were told the number of correct responses they had provided for the total test and for each core-area subsection, together with corresponding means and standard deviations of scores on the total test and each of the eight subsections, earned by examinees who participated in the first six test administrations. Beginning with the April 27, 1985 test administration, and continuing thereafter, NBCC also reported a minimum criterion score, and provided a statement on whether each examinee had, or had not, passed the Examination. Since 1985, NBCC has administered the Examination twice a year during (or close to) April and October. The Examination also is administered at the annual AACD national convention.

The Purpose and Nature of this Study

In response to a request from Dr. P. J. McDonough, Executive Director of the American Association for Counseling and Development, this study was undertaken to examine one aspect of the validity of the NBCC Examination. In particular, we sought to assess the judgments of professional counselors on the relevance of the entire NBCC Examination, its major components,

and each of the topics it assesses to their daily work as counselors.

The form of the study was a confidential mailed survey of National Certified Counselors who had completed the NBCC Examination between January 1, 1983 and September 9, 1985. The sample of counselors was restricted to those residing in the United States and those associated with the Armed Services of the United States, exclusive of those residing in Puerto Rico. Each sampled counselor was sent a package of materials that included a written request for cooperation in the study, signed by the Chairperson of the NBCC Board of Directors and the Director of NBCC, a 121-item survey questionnaire, three customized mark-sense-readable response forms, an NBCC pencil, and a stamped return envelope. Details of survey methodology are reviewed in Chapter II of this report.

The survey questionnaire requested judgments of the job relevance of the overall NBCC Examination and the job relevance of each of the 112 knowledge topics and knowledge of skills topics that compose the examination. It is important to note that judgments of the job relevance of individual test items were not requested, nor were sampled counselors asked to judge the congruence between the items that compose the Examination and the topics that define Examination content. Those aspects of the content validity of the NBCC Examination might be legitimate subjects for further study.

Chapter II

Methodology

This chapter contains a description of the methods used to conduct a survey of a nationally-representative sample of National Certified Counselors. It begins with a listing of the research questions that the study sought to answer in order to assess the job relevance of topics assessed by the National Board for Certified Counselors Examination. Subsequent sections provide a description of the questionnaire that was used to secure information on the job relevance of the Examination, a description of the population of counselors that was sampled, a discussion of the sampling procedures that were used, and a description of mailout and follow-up procedures that were employed so as to maximize the proportion of usable responses received from sampled counselors.

The methodological consequences of the design of the survey are also reviewed in this chapter. In particular, we describe the response rates obtained following each attempt to secure information, the results of various analyses of sample representativeness, the consequences of slight over-representation of white non-Hispanics in the sample obtained, and the precision of estimates of the job relevance of the Examination, based on judgments of the entire sample of counselors and the judgments of significant subsamples of counselors.

The information provided in this chapter is of critical importance in evaluating the validity and trustworthiness of the results of the survey. For example, although it is desired to

generalize the findings of this survey to the entire population of National Certified Counselors who reside in the contiguous United States or who can be reached through military APO box numbers, the less-than-perfect response rate realized through the survey requires that such generalization be questioned. Fortunately, analyses of sample representativeness provided in this chapter substantiate a claim to statistical generalization of the findings reported in Chapter III.

Valid substantive generalization of survey findings depends on the clarity of survey materials and the honesty and cooperativeness of respondents. Clarity must be defended on judgmental bases, and honesty must be accepted at face value. Noting that similar percentages of cooperating counselors responded to the first and the last questions on the survey questionnaire supports the claim that respondents were interested in the purposes of the survey and, once having made the decision to cooperate, gave the survey their full and complete attention.

Research Questions to be Answered

The survey was designed to address the following research questions:

I. How do counselors rate the job relevance of the NBCC Examination as a whole?

   A. What proportion of counselors say that the knowledge covered by the Examination as a whole is relevant to the work that they do as practicing counselors?

B. To what degree do counselors say that the knowledge assessed by the Examination is relevant to the work they do as practicing counselors?

II. How do counselors rate the job relevance of each of the knowledge topics and each of the knowledge of skills topics assessed by the NBCC Examination?

A. What proportion of counselors say that each of the knowledge topics and each of the knowledge of skills topics assessed by the NBCC Examination are relevant to the work they do as practicing counselors?

B. To what degree do counselors say that each of the knowledge topics and each of the knowledge of skills topics assessed by the NBCC Examination are relevant to the work they do as practicing counselors?

III. Do counselors' evaluations of the relevance of the NBCC Examination vary, depending on their characteristics?

A. Do counselors' evaluations of the overall Examination vary, depending on their characteristics?

1. Specialty area of respondent
2. Type of major in highest degree
3. Ethnic group membership

B. Do counselors' evaluations of topics grouped by core area vary, depending on their characteristics?

1. Specialty area of respondent
2. Type of major in highest degree
3. Ethnic group membership

Questionnaire

A complete copy of the survey questionnaire is included in Appendix A. The questionnaire began with a question asking each counselor to judge the relevance of the NBCC Examination as a whole to his or her practice as a counselor.

Questions 2 to 113 were organized within the eight core areas of the NBCC Examination. Each question asked respondents to judge the relevance to their practice as counselors of each of the knowledge topics and knowledge of skills topics assessed by the Examination. Counselors were asked to respond on a five-point scale, using the options "Knowledge CRUCIAL to practice as a counselor," "knowledge IMPORTANT to practice as a counselor," "knowledge OF QUESTIONABLE RELEVANCE to practice as a counselor," "knowledge NOT RELEVANT to practice as a counselor," and "DON'T KNOW."

After considering the relevance of the individual topics assessed by the NBCC Examination, respondents were asked to reconsider the relevance to their work as practicing counselors of the knowledge tested on the entire NBCC Examination.

The questionnaire ended with two sets of additional questions. The first set sought background and demographic information such as each respondent's academic major during his or her highest-level degree, each respondent's counseling specialty, and each respondent's racial or ethnic group membership. The second set sought respondents' descriptions of their level of satisfaction with counseling as a profession, and their judgments of the aspects of their work that they found to be most satisfying and least satisfying.

The Target Population

Initially, we sought to generalize the results of this survey to the population of 15,257 professional counselors who had taken the NBCC Examination during one of the eight test administrations held between January 1, 1983 and September 9, 1985. A complete listing of that population, together with some demographic information, was provided in the form of a magnetic tape by the National Board for Certified Counselors.

An operational sampling frame was developed from the initial target population, as listed on the NBCC data tape, by omitting two groups. First, counselors exempted from taking the Examination because they held other relevant certification (Eligibility Option D) were deleted from the population. Second, counselors who resided outside the forty-eight contiguous states, Alaska and Hawaii and who could not be reached through U. S. Armed Services APO post office addresses were omitted, so as to simplify the administration of a mail survey. These restrictions reduced the target population of the survey to 13,230 persons.

Sampling Procedures

Required Sample Size

Although stratified random sampling of counselors was used to select the sample for this survey, it was not assumed that stratification would result in increased sampling efficiency. Therefore, the required sample size was estimated by using a formula appropriate to simple random sampling from a finite population. The sample size required to ensure that errors in

estimating population percentages were within plus or minus five percent with 95% confidence was determined by using the formula

$$n = \frac{(t/e)^2[P(1-P)]}{1 + (1/N)\,[(t/e)^2\,P(1-P) - 1]}$$

where n = sample size

t = standard normal deviate

e = allowable estimation error

P = population proportion

N = population size

The required sample size that resulted from use of this formula was 374. The target sample size used for the survey was increased to somewhat more than 700 for two reasons: first, to increase the precision with which population proportions of relevance judgments could be estimated; and second, to reduce or eliminate the effects of random errors due to non-response. The final sample size selected was 739 counselors.

Sampling Process

Prior to sample selection, the sampling frame was stratified by using two stratification variables: first digit of the counselors' zip codes and the dates on which the NBCC Examination was administered. Proportional allocation of sample sizes to strata with simple random sampling within each stratum was then used to select sampled counselors. This design was used to ensure the geographic representativeness of the national sample of counselors as well as the proportional representativeness of counselors who had taken the NBCC Examination during each of its eight administrations. As noted above, stratification was not expected

to increase the precision of sample estimates since the variability of counselors' judgments was not expected to be smaller within geographic regions of the nation nor within subpopulations of counselors who completed a particular form of the NBCC Examination, than in the target population as a whole. The percentage of the total sampling frame represented in each stratum was determined by using the formula ($N_s/N \times 100$), where N_s represents the stratum size and N the total population size. The number of subjects sampled from each stratum was proportional to the size of the sampling frame in that stratum. Proportions of the sampling frame and sample sizes allocated to each stratum are shown in Table 1.

The sampling fraction (f_s) for each of the 80 resulting strata was specified and applied to the SPSS-X sample selection program, which was run on UNC-Greensboro's VAX 11/780 computer. For each subject in each stratum, a random number between zero and one was generated. If the number assigned to a given individual was less than f_s, that counselor was included in the sample. Seven hundred thirty-nine (739) counselors were selected in this manner.

Mailout and Follow-up Procedures

Each of the 739 persons in the sample was sent an initial survey packet on June 10, 1986. This packet included:

1. a two-page cover letter,
2. instructions for completing the survey,
3. a survey instrument,
4. three coded response forms,

Table 1

Propotional Allocation of Sampling Frame and Sample Size Within Strata

First Digit of Zip Code		CERTDATE (date of test administration - YYMMDD) 830129	830625	831029	840225	840630	841027	850427	850928	ROW TOTAL
		01	02	03	04	05	06	07	08	
0	N	219	74	233	116	134	573	61	26	1440
	n	12	4	13	7	8	30	4	2	81
	%	1.6	.56	1.76	.84	1.01	4.33	.46	.19	10.9
1	N	343	87	247	125	158	585	56	39	1640
	n	19	5	14	7	9	31	3	3	91
	%	2.6	.66	1.86	.94	1.19	4.42	.42	.29	12.4
2	N	306	98	398	163	292	1015	52	47	2372
	n	17	6	22	9	16	54	3	3	130
	%	2.3	.74	3.00	1.23	2.20	7.67	.39	.35	17.9
3	N	193	49	176	80	64	365	32	32	991
	n	11	3	10	5	4	20	2	2	57
	%	1.47	.37	1.3	.60	.48	2.75	.24	.24	7.5
4	N	370	125	353	103	152	545	51	33	1732
	n	20	7	19	6	9	29	3	2	95
	%	2.7	.94	2.66	.77	1.14	4.11	.38	.24	13.1
5	N	111	37	161	49	56	350	23	10	797
	n	6	2	9	3	3	19	2	1	45
	%	.87	.27	1.2	.37	.42	2.64	.17	.07	6.0
6	N	282	67	245	96	174	635	38	26	1564
	n	15	4	13	6	10	34	3	2	87
	%	2.1	.51	1.85	.72	1.31	4.79	.28	.19	11.8
7	N	184	29	131	138	93	454	35	12	1079
	n	10	2	7	8	5	25	2	1	60
	%	1.39	.21	.99	1.04	.70	3.43	.26	.09	8.2
8	N	105	39	102	74	36	314	47	21	739
	n	6	3	6	4	2	17	3	2	43
	%	.79	.29	.77	.55	.27	2.37	.35	.15	5.6
9	N	142	66	144	41	80	348	37	17	876
	n	8	4	8	3	5	19	2	1	50
	%	1.07	.49	1.08	.30	.60	2.63	.27	.12	6.6
COLUMN TOTAL		2255	671	2190	985	1239	5184	432	263	13230
		124	40	121	58	71	278	27	19	738
		17.0	5.1	16.6	7.4	9.4	39.2	3.3	2.0	100.0

5. a stamped, self-addressed return envelope,

and

6. a sharpened #2 pencil with the NBCC logo.

Each letter was individually hand-addressed to the intended respondent, and was individually signed in the names of Dr. Betty Hedgeman, Chairperson of the NBCC Board of Directors, and Dr. Judith Rosenbaum, Director of NBCC. A copy of the letter follows.

On July 3, 1986, approximately three weeks after the initial mailing, a follow-up letter was mailed to the 483 subjects who had not responded to the initial mailing. These letters were also individually hand-addressed to the intended respondents and were hand-signed in the name of Dr. Rosenbaum. A copy of this letter follows.

All sampled counselors who had not responded by July 28, 1986 were mailed another complete survey packet. This packet was identical to the initial packet, with the exception of the cover letter, which was signed in the name of Dr. Rosenbaum. A copy of this letter follows. A total of 344 packets were sent as a part of the second follow-up mailing.

All letters and packets were sent by first class mail. A small number of packets from the initial mailing were returned by the post office with address changes indicated. These packets were re-mailed to potential respondents at their current addresses.

Response Rates

Two hundred fifty-six counselors (34.6% of the sample) responded to the initial mailing. An additional one hundred eighty-four (24.9% of the total sample) responded to the first follow-up letter that was mailed on July 3, 1986. Ninety-seven counselors (13.1% of the total sample) responded to the second complete packet of materials that was mailed on July 28, 1986. Thus, a total of 537 counselors, 72.4% of the total sample, ultimately responded to the survey.

Representativeness of the Sample of Respondents

The representativeness of the sample of respondents was investigated by comparing the distributions of respondents to Question 1 of the NBCC Survey ("How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination considered as a whole?") to the distribution of counselors in the sampling frame, on five characteristics: gender, ethnic group membership, eligibility option, highest academic degree earned, and the date the Examination was taken. Eligibility option refers to the criteria by which applicants for certification were defined as eligible to take the Examination. Examination date was included in the list of variables for which representativeness was to be investigated because a refined version of the NBCC Examination was administered on each of the first six testing dates.

Gender

Very little difference was found between the sampling frame and the respondents to Question 1 on the NBCC survey when the two

	Sampling Frame	Respondents to Question 1	Difference
Male	34.5%	32.7%	(-)1.8%
Female	65.5%	67.3%	(+)1.8%
		n = 493	

x^2 = 0.707; not significant, p.>.10

Table 2. Corresponding Percents by Gender: Sampling Frame and Respondents to Question 1

groups were compared by male/female ratio (see Table 2). Males composed 34.5% of the sampling frame members, and 65.5% were female. Among the 493 counselors who responded to Question 1 and reported their gender, 32.7% were male and 67.3% were female. The over-representation of females in the sample of respondents by less than 2% was not large enough to represent a significance difference (Chi-square = 0.707, $p > 0.10$). The sample of respondents appeared to represent the sampling frame reasonably well with respect to gender.

Ethnic Group Membership

Comparison of the ethnic group membership of those in the sampling frame and counselors who responded to Question 1 on the NBCC Survey survey revealed a somewhat larger difference than did the comparison of gender distributions discussed earlier (see Table 3). The largest differences were seen in the percentages of Caucasians: 83.3% of the sampling frame, but 88.2% of those who responded to Question 1, listed themselves as Caucasian. The over-representation of Caucasians in the sample by 4.9% was grounds for further investigation. The second largest difference between the ethnic distributions was found in the under-representation of Hispanics among those who responded to Question 1: 3.1% of those in the sampling frame reported their ethnic group membership as Hispanic, and only 0.8% of those who responded to Question 1 did so. The proportions of those who classified themselves as Black were 11.6% in the sampling frame and 10.2% in the sample of respondents to Question 1. Very similar percentages in the two groups were reported by those who classified themselves as Asian-Americans or American Indians. A somewhat larger, but

	Sampling Frame	Respondents to Question 1	Difference
Caucasian	83.3%	8.2%	(+)4.9%
Black	11.6%	10.2%	(-)1.4%
Hispanic	3.1%	0.8%	(-)2.3%
Asian-American	0.6%	0.8%	(-)0.2%
American Indian	0.5%	0.0%	(-)0.5%
Other	0.9%	0.0%	(-)0.9%
		n = 255	

X^2 = 9.257; not significant, p.>.05

Table 3. Corresponding Percents by Ethnicity: Sampling Frame and Respondents to Question 1

still insignificant, difference between the proportions of all "Other" ethnic groups was found: Nine-tenths of one percent of those in the sampling frame and none of those who responded to Question 1, reported their ethnic group membership as "Other." These last differences were not significant due to the very small frequencies involved. A chi-square analysis of the goodness of fit of the reported ethnic group distribution of those who responded to Question 1 on the NBCC Survey, compared to the distribution of ethnic group membership of those in the sampling frame, resulted in a value of 9.257, which was not statistically significant at the 0.05 level.

Eligibility Option

Distributions of counselors in the sampling frame and counselors who responded to Question 1 were quite similar, when compared on the option by which they were declared eligible for certification testing (see Table 4). Among those in the sampling frame, 79.6% were admitted for testing under Option A, graduation from a CACREP-accredited degree program; 76.9% of the respondents to Question 1 were also in that category, resulting in a difference of 2.7%. Option B, completion of a non-CACREP accredited degree, applied to 3.4% of those in the sampling frame and 3.6% of those who responded to Question 1 on the NBCC Survey. Again, the difference of 0.2% was considered minor. The percentages of both groups admitted for testing under Option C, work experience, were also similar: 17.0% of the sampling frame and 15.9% of those who responded to Question 1 of the NBCC Survey. Overall analysis of these differences via a chi-square goodness-of-fit

	Sampling Frame	Respondents to Question 1	Difference
A	79.6%	76.9%	(-)2.7%
B	3.4%	3.6%	(+)0.2%
C	17.0%	15.9%	(-)1.1%
		n = 523	

X^2 = 0.912; not significant, p.>.10

Table 4. Corresponding Percents by Eligibility Option: Sampling Frame and Respondents to Question 1

test resulted in a value of 0.912, which was not significant at the 0.10 level.

Highest Degree Earned

Very small differences between the distributions of highest degree earned were found for counselors in the sampling frame and counselors who responded to Question 1 on the NBCC Survey (see Table 5). The largest, but still insignificant difference, 0.6%, was found between percentages listing the doctorate as their highest degree; 14.3% of counselors in the sampling frame were in that category, compared to 13.7% of counselors who responded to Question 1. Two categories, educational specialist and the master's degree, revealed percentage differences of 0.4%. The remaining two categories, bachelor's degree and the certificate of advanced study (C.A.G.S.), revealed differences of 0.2% and 0.0%, respectively. A chi-square goodness-of-fit analysis of these data resulted in a value of 1.011, which was not significant at the 0.10 level. The sample of respondents represented the sampling frame very well in terms of highest degree earned.

Date Tested

Finally, the dates on which the NBCC Examination had been administered were used to examine the representativeness of the sample of counselors who responded to Question 1 on the NBCC Survey. The percentage distributions of counselors in the sampling frame and counselors who responded to Question 1 were compared across the eight dates used for administration of the NBCC Examination. The largest percentage differences between the two groups appeared for the February 25, 1984 and April 27, 1985 testing dates (see Table 6). However, those differences were

	Sampling Frame	Respondents to Question 1	Difference
Doctorate	14.3%	13.7%	(+)0.6%
Educational Specialist	2.2%	2.6%	(+)0.4%
Masters	82.7%	83.1%	(+)0.4%
Bachelors	0.4%	0.2%	(-)0.2%
C.A.G.S.	0.4%	0.4%	(+)0.0%
		n = 503	

X^2 = 1.011; not significant, p.>.10

Table 5. Corresponding Percents by Highest Degree Earned: Sampling Frame and Respondents to Question 1

	Sampling Frame	Respondents to Question 1	Difference
1/29/83	17.0%	17.5%	(+)0.5%
6/25/83	5.1%	5.6%	(+)0.5%
10/29/83	16.6%	15.9%	(-)0.7%
2/25/84	7.4%	6.5%	(-)0.9%
6/30/84	9.4%	9.1%	(-)0.3%
10/27/84	39.2%	38.7%	(-)0.5%
4/27/85	3.3%	4.2%	(+)0.9%
9/28/85	2.0%	2.6%	(+)0.6%
		n = 504	

$x^2 = 3.246$; not significant, p.>.10

Table 6. Corresponding Percents by NBCC Examination Administration Date: Sampling Frame and Respondents to Question 1

only 0.4% and were not considered significant. Differences for the other test date categories were even smaller, and a chi-square goodness-of-fit analysis resulted in a value of 3.246, which was not statistically significant at the 0.10 level. In summary, the sample of respondents represented the sampling frame very well, in terms of test administration dates.

Negligible Consequences of the Slight Over-Representation of Caucasians

As noted earlier, when the distributions of counselors in the sampling frame and counselors who responded to Question 1 were compared by ethnic group membership, it was found that 4.9% more of the distribution of respondents than of the distribution of sampling frame members classified themselves as Caucasians. Although the ethnic group distributions of counselors in the sampling frame and counselors who responded to Question 1 did not differ significantly at the 0.05 level, we decided to examine the potential effects of this non-significant difference on the representativeness of the relevance judgment distributions of the respondents. These effects were investigated by computing cross-tabulations between the ethnic group membership of respondents, and their distributions of judgments in response to Questions 1 and 114 of the NBCC Survey. No significant relationship was found between ethnic group membership and responses to Question 1. A chi-square value of 8.57 with 12 degrees of freedom resulted from the test of association shown in Table 7. This value was negligible, and would have occured with a probability of 0.7394 under the null hypothesis of no association between ethnic group

Ethnic Group	Crucial	Important	Questionable	Not Relevant	Don't Know
Caucasian n = 225	f = 38 16.9%	f = 131 58.2%	f = 46 20.4%	f = 8 3.6%	f = 2 0.9%
Black n = 26	f = 3 11.5%	f = 14 53.8%	f = 6 23.1%	f = 2 7.7%	f = 1 3.8%
Hispanic n = 2	f = 1 50.0%	f = 1 50.0%	f = 0 0%	f = 0 0%	f = 0 0%
Asian-American n = 2	f = 1 50.0%	f = 0 0%	f = 1 50.0%	f = 0 0%	f = 0 0%
Total	**43**	**146**	**53**	**10**	**3**	**Grand Total = 255**

X^2 = 8.57; not significant; p = .74

Table 7. Percentage distribution of responses to Question 1 of the NBCC Survey, by ethnic group membership of respondent. Percents are calculated within rows.

membership and response to Question 1. It was concluded, therefore, that ethnic group membership had little effect on responses to Question 1. A similar analysis of the relationship between ethnic group membership and responses to Question 114 on the NBCC Survey also produced an insignificant chi-square value, as shown in Table 8 (13.63 with 12 degrees of freedom; $p = 0.3251$). Because neither responses to Question 1 nor to Question 114 showed sensitivity to ethnic-group membership, it was concluded that the slight over-representation of Caucasians in the sample of respondents had negligible effects on the survey results.

Precision of the Estimates

As noted earlier, this survey was designed to secure precise estimates of proportions of counselors who judged the relevance of the NBCC Examination, and its components, to their work as practicing counselors. The goal for precision was defined as estimates for the entire sample of responding counselors that were within plus or minus five percent of the values that would have been obtained, had responses been provided by the entire population of counselors, with 95 percent confidence.

The precision of an estimate of a population proportion depends principally on two factors: the size of the sample used to form the estimate, and the actual value of the population proportion. The larger the sample size, the more precise the estimate. The closer the population proportion is to 0.5, the less precise the estimate.

A method that is commonly used to express the precision of an estimated proportion is a confidence interval. Confidence

Ethnic Group	Crucial	Important	Questionable	Not Relevant	Don't Know
Caucasian n = 225	f = 52 23.4%	f = 109 49.1%	f = 49 22.1%	f = 11 5.0%	f = 1 0.5%
Black n = 26	f = 1 4.0%	f = 13 52.0%	f = 7 28.0%	f = 3 12.0%	f = 1 4.0%
Hispanic n = 2	f = 1 50.0%	f = 1 50.0%	f = 0 0%	f = 0 0%	f = 0 0%
Asian-American n = 2	f = 1 50.0%	f = 0 0%	f = 1 50.0%	f = 0 0%	f = 0 0%
					Grand Total = 251

x^2 = 13.63; not significant; p = .34

Table 8. Percentage distribution of responses to Question 114 of the NBCC Survey, by ethnic group membership of respondent. Percents are calculated within rows.

intervals provide upper and lower limits between which a true population proportion can be assumed to fall, with a specified level of confidence. Equations for estimating upper and lower confidence limits on population proportions are as follows:

$$P_{upper} = p + [t \quad (1 - f) \; (pq/(n - 1)) + 1/2n]$$

and

$$P_{lower} = p - [t \quad (1 - f) \; (pq/(n - 1)) + 1/2n]$$

where

p denotes the sample proportion

q equals (1 - p)

t denotes an abscissa from the standard normal distribution, corresponding to the desired level of confidence

f denotes the sampling fraction (n/N)

n denotes the sample size

N denotes the population size

To determine whether the goal of estimating population proportions for the entire population of certified counselors within plus or minus five percent with 95 percent confidence had been realized, the equations provided above were applied to several sample proportions. A 95 percent confidence interval was first computed on the proportion of counselors who responded "Crucial" to Question 1: "How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination considered as a whole?" The proportion of counselors who responded "Crucial" to this question was 0.150 (15.0 percent). The resulting confidence interval ranged from 0.119 (11.9 percent) to 0.181 (18.1 percent). This confidence interval had a

total width of 6.2 percent, which is well within the goal of plus or minus 5 percent (which corresponds to a total width of 10 percent).

The proportion of counselors who responded "Important" to Question 114: "Having reviewed the content areas covered by the NBCC Examination, please answer the following question now: How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination taken as a whole?" was 0.518. The number of counselors who responded to this question was 523. Applying the confidence interval equations given above resulted in a lower confidence limit of 0.474 (47.4 percent) and an upper confidence limit of 0.562 (56.2 percent). Again the total width of this confidence interval (8.8 percent) was well within the precision goal of plus or minus five percent, despite the sample proportion of 0.518 being very close to 0.50, the value for which confidence intervals are widest.

In summary, we can conclude that the overall estimation precision goals of the survey were realized, and that estimates of proportions for the entire population of certified counselors are within plus or minus five percent of their corresponding population values, with 95 percent confidence.

In addition to reporting estimated proportions for the entire population of certified counselors, we report estimated proportions for several subpopulations of interest (see Chapter 3). Since the sample sizes for subpopulations are often appreciably smaller than those for the entire population, estimates of subpopulation proportions will sometimes be considerably less

precise than will estimates of proportions for the entire population of counselors. Perhaps the most extreme example of imprecision applies to estimates of population proportions based on the 27 counselors who reported "Social Work" as their academic major during their highest degree. Of these counselors, 0.333 (33.3 percent) responded "Crucial" to Question 114. The 95 percent confidence interval on the corresponding subpopulation proportion who would answer "Crucial" to Question 114 ranged from a lower limit of 0.133 (13.3 percent) to an upper limit of 0.532 (53.2 percent). The width of this confidence interval was 39.9 percent.

When interpreting the precision of other estimates for subpopulations reported in Chapter 3, the widths of 95 percent confidence intervals shown in Table 9 can be used as a general guide. These confidence interval widths represent "worst cases" in the sense that confidence intervals on subpopulation proportions based on the indicated sample sizes will not exceed the values shown. As an example of the use of values in Table 8, if a subpopulation proportion were estimated from a sample of 200 cases, the width of the confidence interval would not exceed 14.3 percent. Therefore, the subpopulation proportion would be estimated within plus or minus 7.15 percent with 95 percent confidence.

Sample Size	Width of 95% Confidence Interval
500	8.8%
400	9.9%
300	11.5%
200	14.3%
100	20.6%
50	29.9%

Table 9. Maximum widths of 95 percent confidence intervals corresponding to various sample sizes selected at random from populations or subpopulations of National Certified Counselors.

Chapter III

Results and Discussion

This chapter contains the results of a survey of a nationally-representative sample of counselors who have been certified by the National Board for Certified Counselors (NBCC). The survey was designed to assess counselors' judgments of the relevance of the topics measured by the NBCC Examination to their work as practicing counselors. As noted in Chapter I, the fundamental purpose of the survey was to assess the "job relevance" of the NBCC certification Examination.

This chapter consists of four major sections. In the first, we summarize the judgments expressed by the entire sample of responding counselors concerning the relevance of the entire NBCC Examination, the relevance of topics concerning knowledge and knowledge of skills in each of the eight core areas of the examination, and the relevance of individual topics measured by the Examination. In the second section we report judgments concerning the relevance of the entire Examination and its major component parts, as expressed by counselors in various specialty areas of practice. The third section contains parallel results for responding counselors who reported enrollment in various academic majors when they earned their highest-level degrees. Finally, the fourth section reports the judged relevance of the Examination by counselors who reported membership in various racial or ethnic groups. This last section provides results that bear indirectly on the perceived fairness of the Examination by members of various racial or ethnic groups. Consistently positive perceptions of relevance could be advanced as an

argument in support of the equity of the Examination, in terms of perceived racial impact.

Judgments of the Entire Sample of Counselors

Respondents were asked to respond to 114 questions concerning the relevance of the NBCC Examination and its component parts. Each of these questions was structured identically, and required that counselors select a response from a five-point scale that read:

Knowledge CRUCIAL to practice as a counselor

Knowledge IMPORTANT to practice as a counselor

Knowledge of QUESTIONABLE RELEVANCE to practice as a counselor

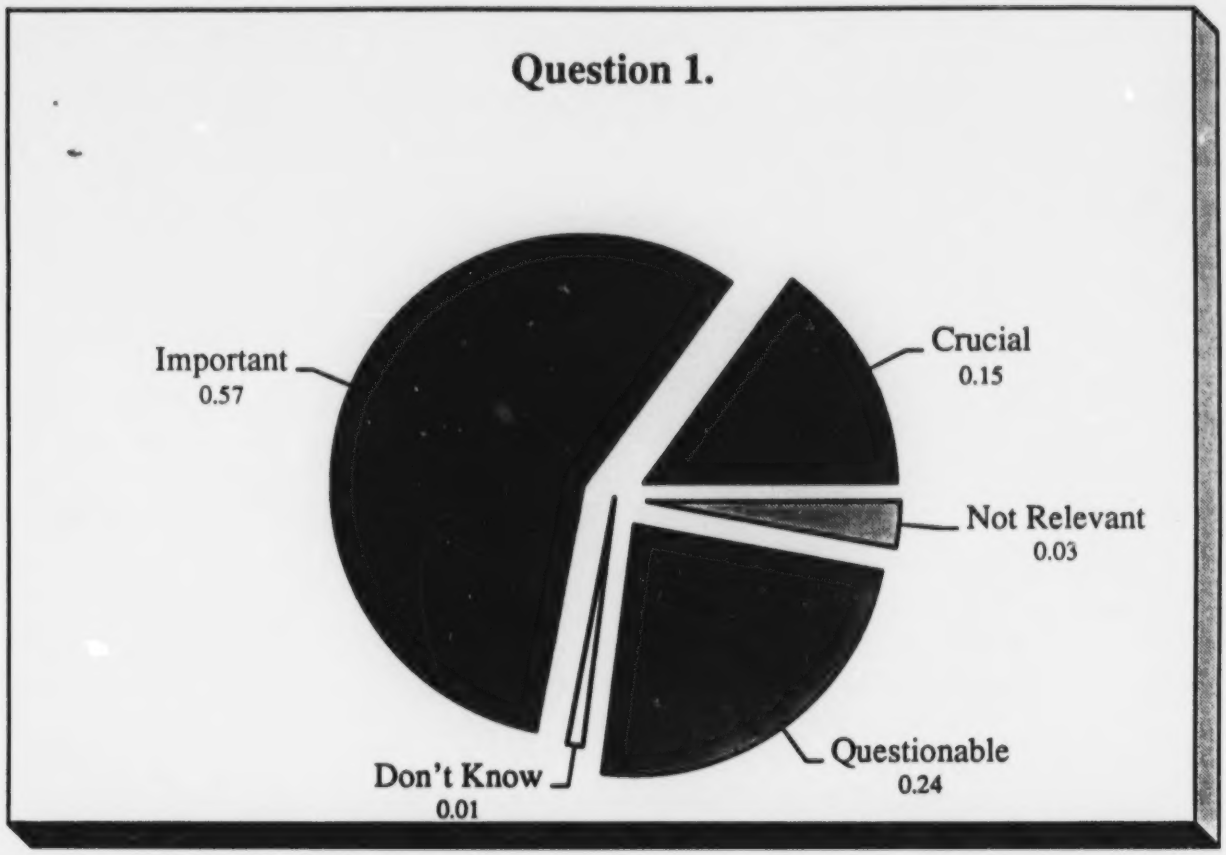
Knowledge NOT RELEVANT to practice as a counselor

and

DON'T KNOW.

Two of the questions concerned the relevance of the entire Examination. The first asked: "How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination considered as a whole?" As shown in Figure 1, almost three-fourths of 527 responding counselors thought that the knowledge tested by the entire NBCC Examination was either "Crucial" or "Important," and only a fourth judged the knowledge tested to be "Questionable." Less than three percent responded "Not Relevant." Clearly, the vast majority of responding counselors judged the NBCC Examination to be "job relevant."

Assuming that some counselors might not remember the detailed content of the NBCC Examination, having completed the



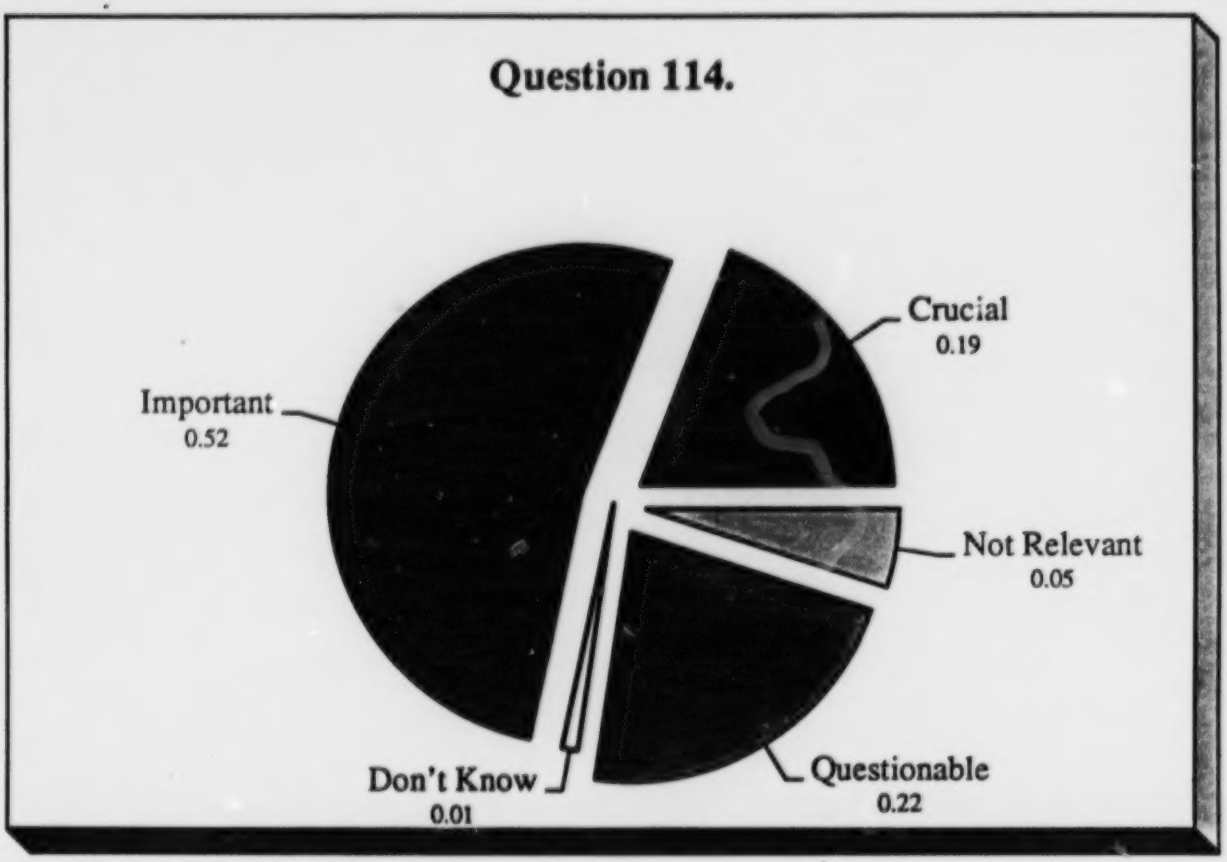
How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination considered as a whole?

Figure 1.

Examination some time in the past, Question 1 was repeated after the respondents had considered the relevance of each of the 112 topics that compose the Examination. Responses to Question 114 (a repeat of Question 1) are summarized in Figure 2, where it can be seen that exposure to the detailed content of the Examination produced little change in the distribution of judgments of the Examination's relevance. Almost four percent more counselors judged the Examination to be "Crucial" to their work, and six percent fewer judged it to be "Important." There was a parallel shift of two percent from the less-extreme to the more-extreme of the negative judgment categories. One might therefore conclude that exposure to items concerning the detailed content of the Examination resulted in somewhat greater polarization of judgments, but the effect was trivially small.

Figures 3 through 18 illustrate summarized distributions of judgments of the relevance of topics that assess knowledge and topics that assess knowledge of skills in each of the eight core areas that compose the NBCC Examination. These results are further summarized in the clustered bar graphs shown in Figures 19 and 20.

Core Area I of the Examination is labeled Human Growth and Development. When judgments of the relevance of knowledge topics in Core Area I were pooled, the resulting distribution was as follows: Forty percent of the judgments were in the "Crucial" category, 50 percent of the judgments were in the "Important" category, seven percent of the judgments were in the "Questionable" category, and one percent of the judgments were in



Having reviewed the content areas covered on the NBCC Examination, please answer the following question now: How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination, taken as a whole?

Figure 2.

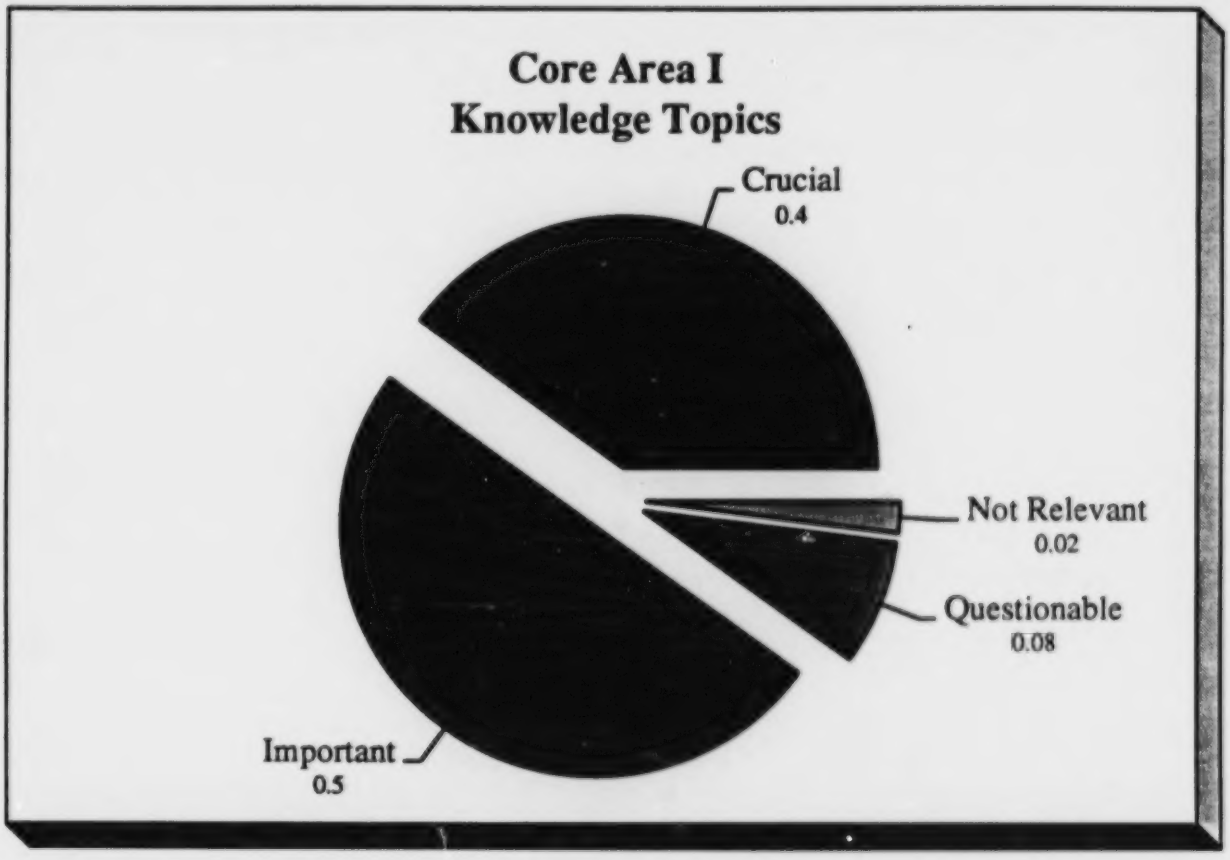

Core Area I
Knowledge Topics
Crucial
0.4
Not Relevant
0.02
Questionable
0.08
Important
0.5

Figure 3.

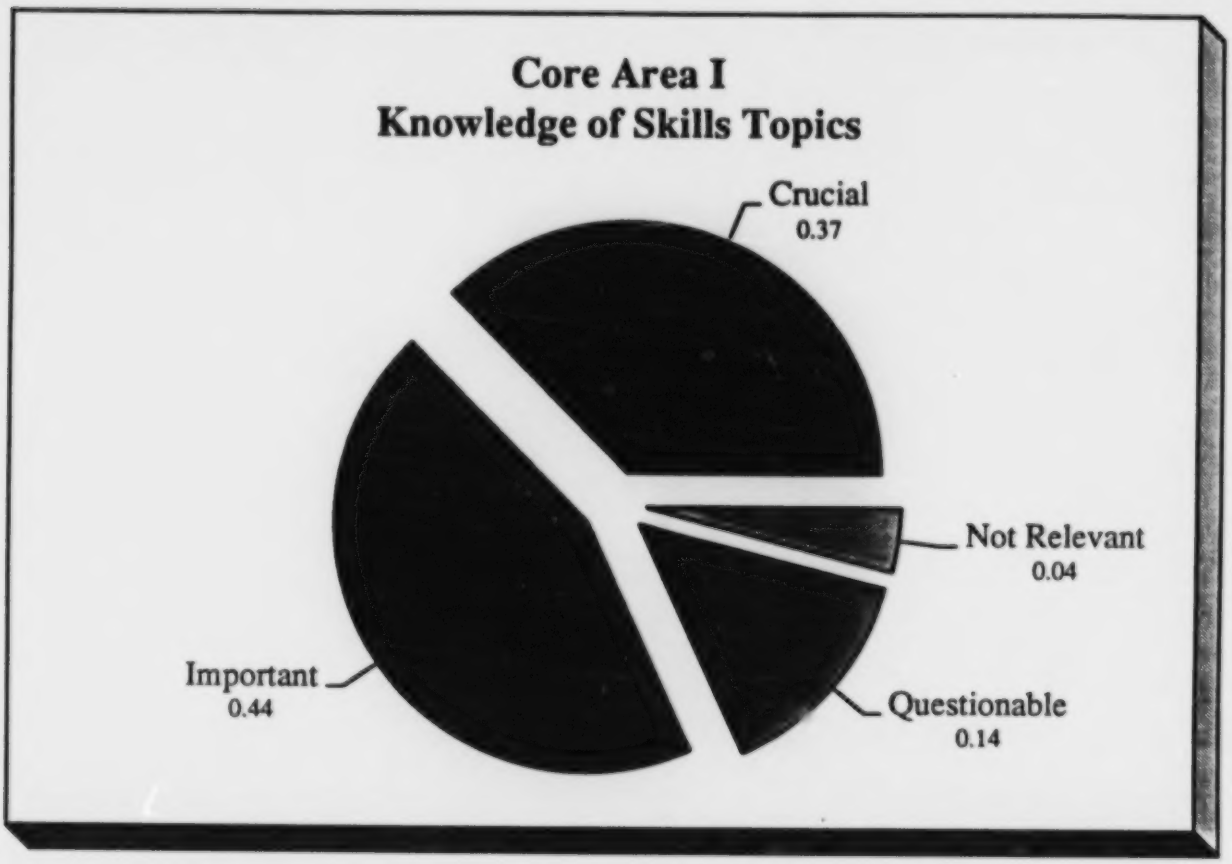

Core Area I
Knowledge of Skills Topics
Crucial
0.37
Not Relevant
0.04
Important
0.44
Questionable
0.14

Figure 4.

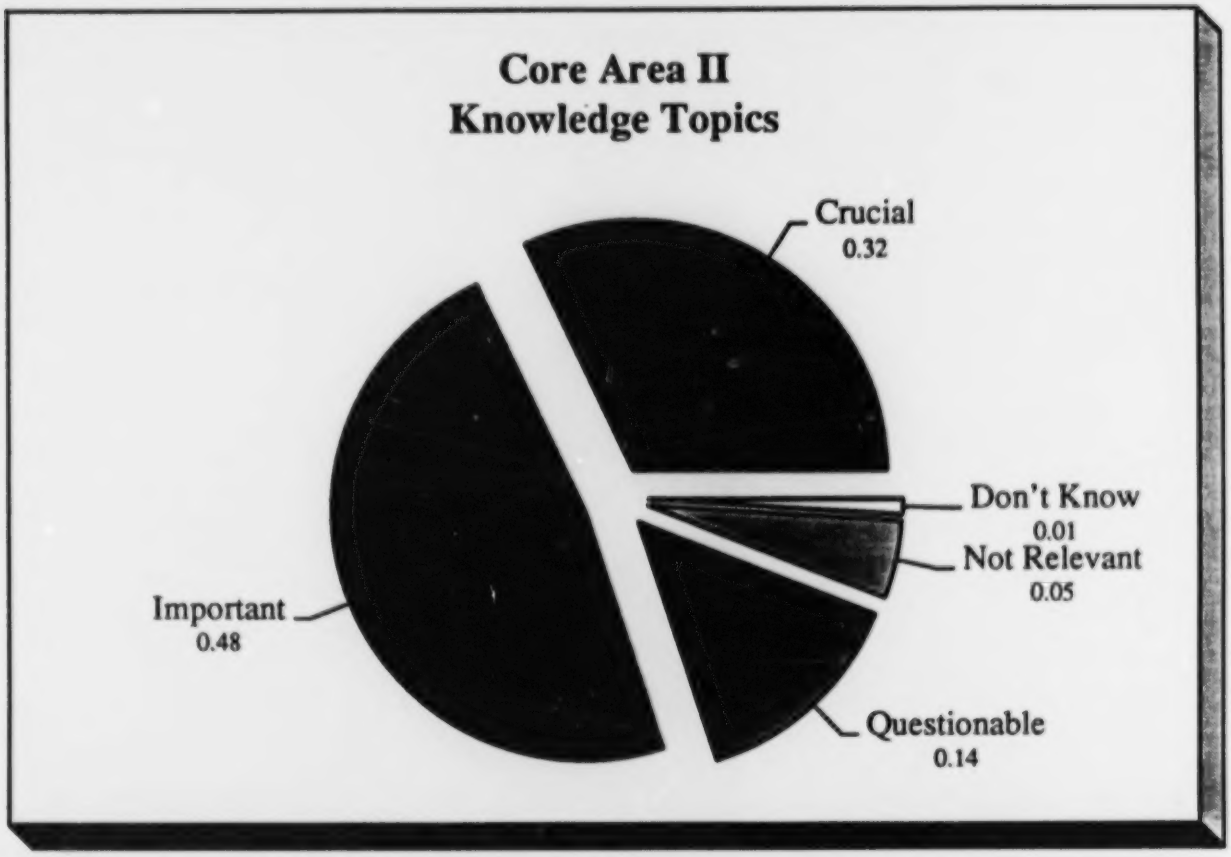

Core Area II
Knowledge Topics
Crucial
0.32
Don't Know
0.01
Not Relevant
0.05
Important
0.48
Questionable
0.14

Figure 5.

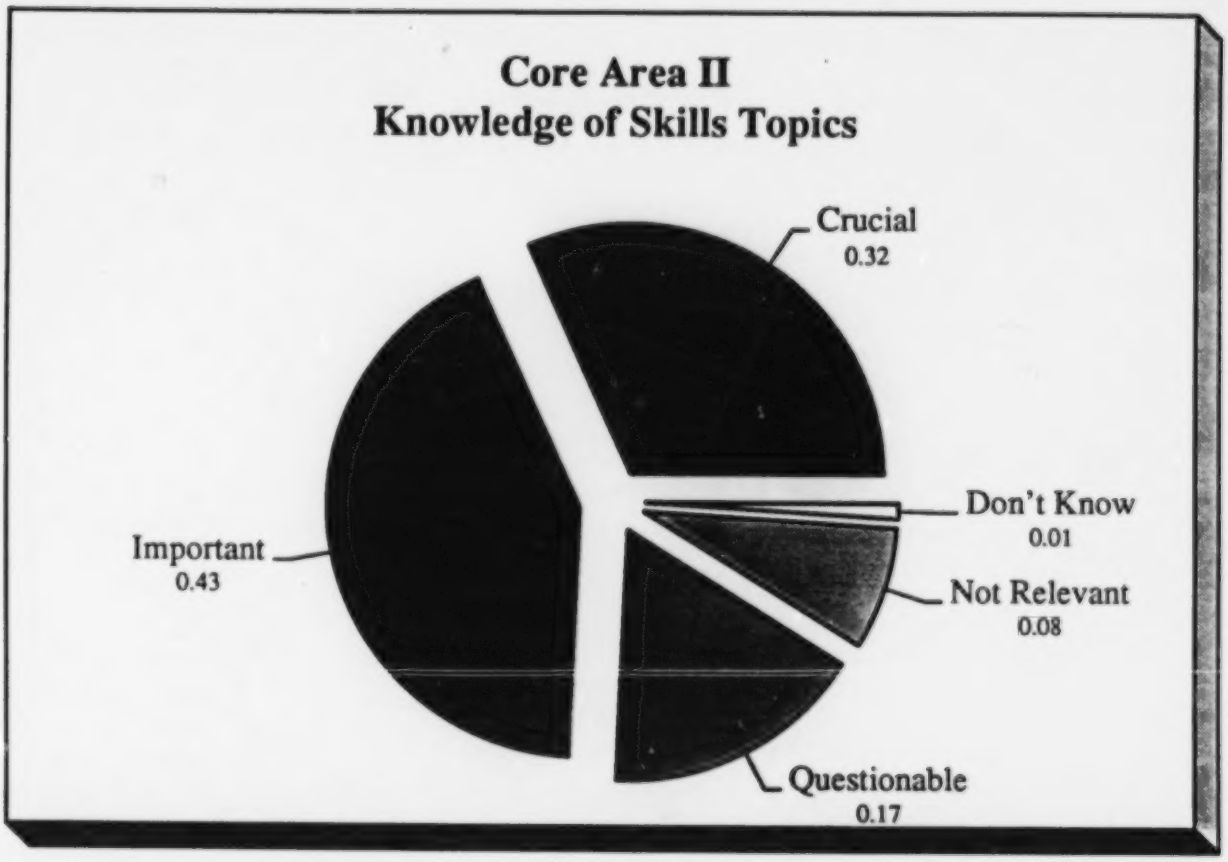

Core Area II
Knowledge of Skills Topics
Crucial
0.32
Don't Know
0.01
Not Relevant
0.08
Questionable
0.17
Important
0.43

Figure 6.

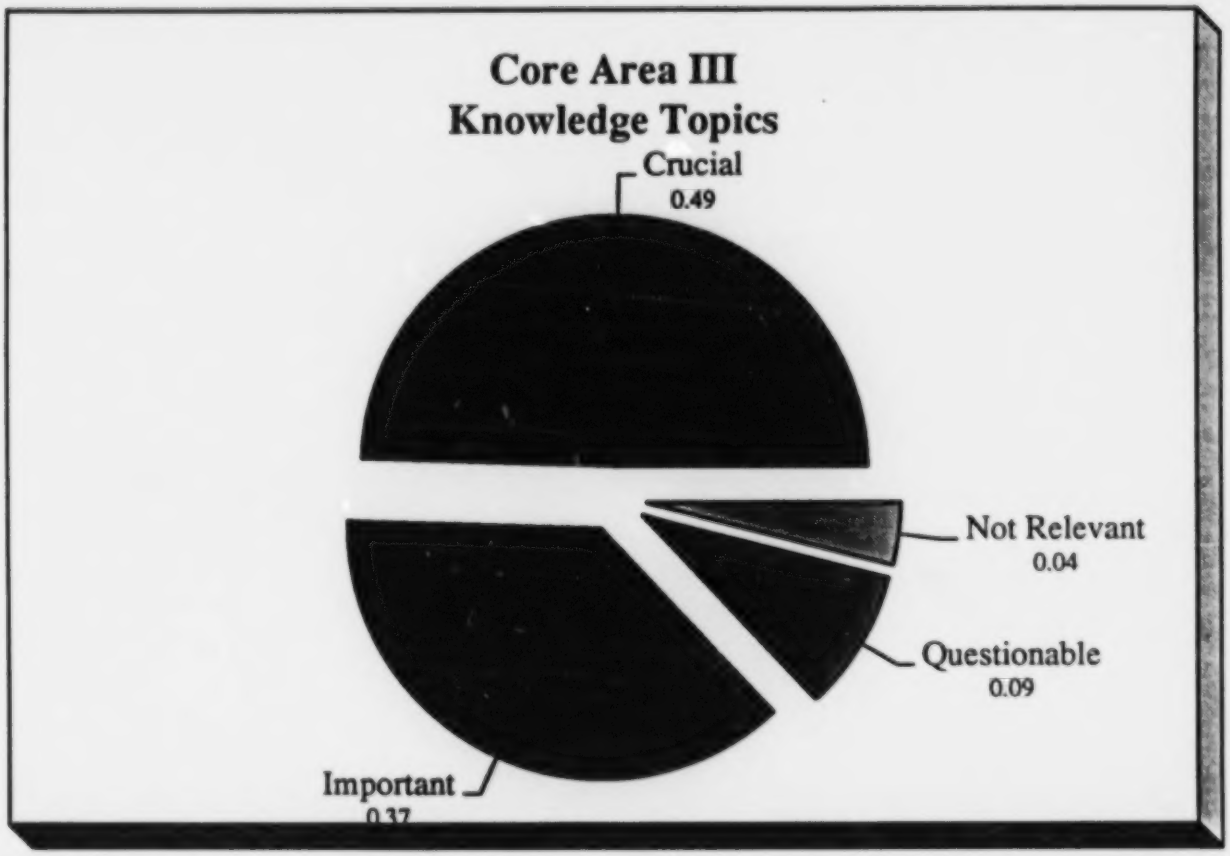

Core Area III
Knowledge Topics
Crucial
0.49
Not Relevant
0.04
Questionable
0.09
Important
0.37

Figure 7.

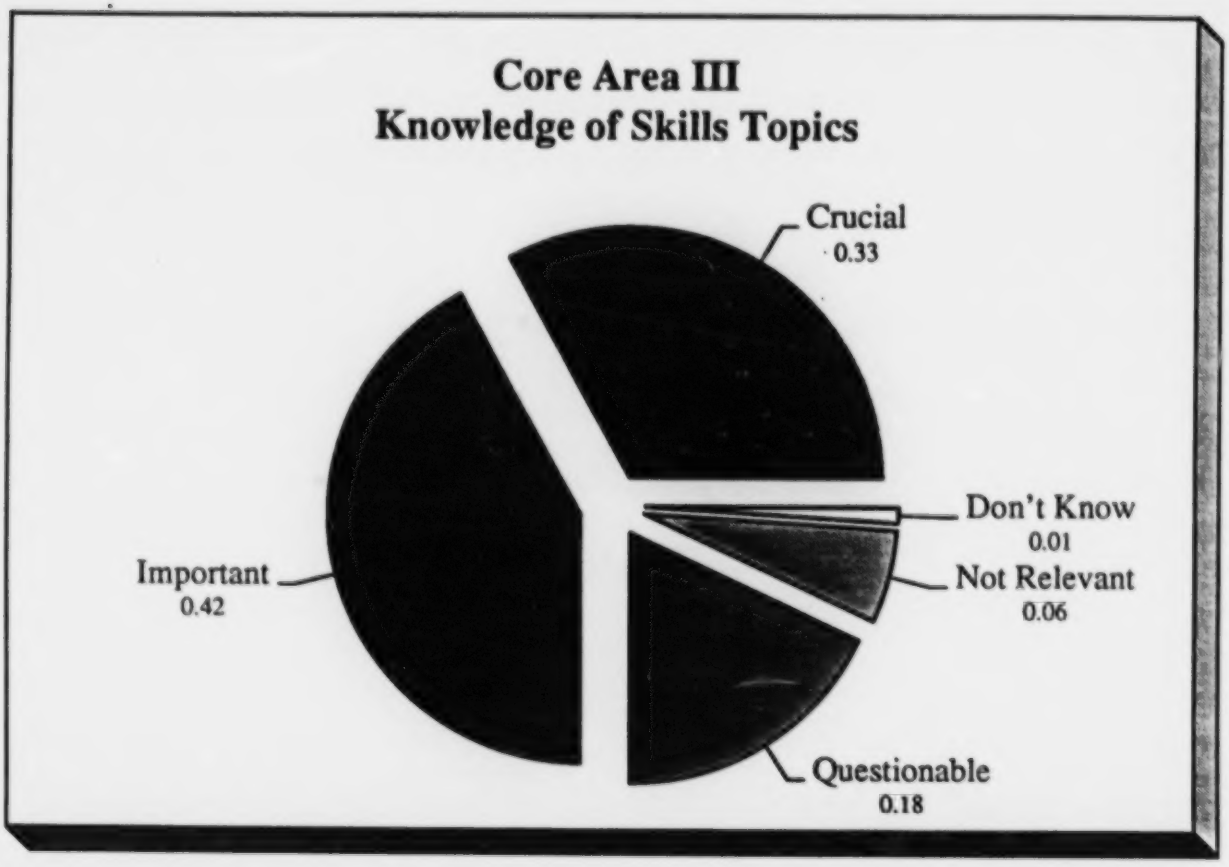

Core Area III
Knowledge of Skills Topics
Crucial
0.33
Don't Know
0.01
Not Relevant
0.06
Questionable
0.18
Important
0.42

Figure 8.

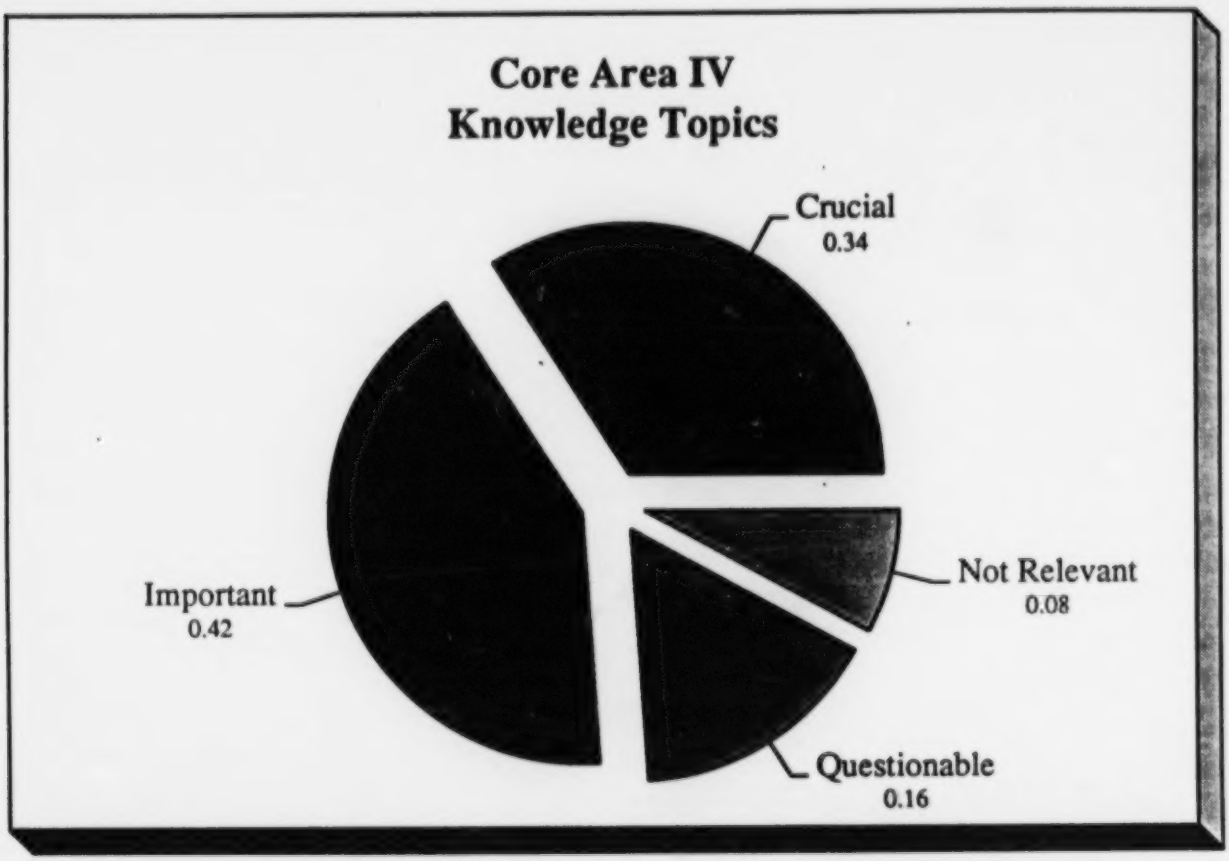

Core Area IV
Knowledge Topics
Crucial
0.34
Not Relevant
0.08
Questionable
0.16
Important
0.42

Figure 9.

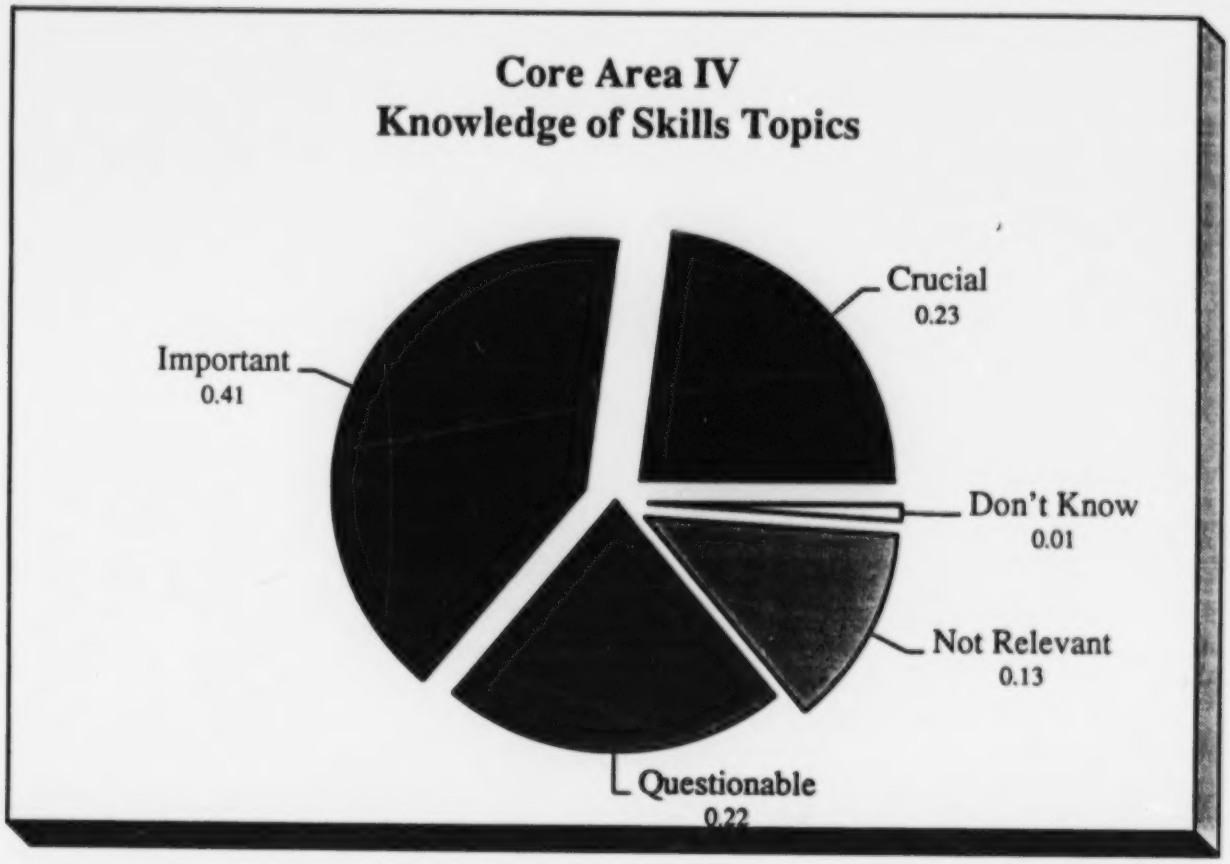

Core Area IV
Knowledge of Skills Topics
Crucial
0.23
Don't Know
0.01
Not Relevant
0.13
Questionable
0.22
Important
0.41

Figure 10.

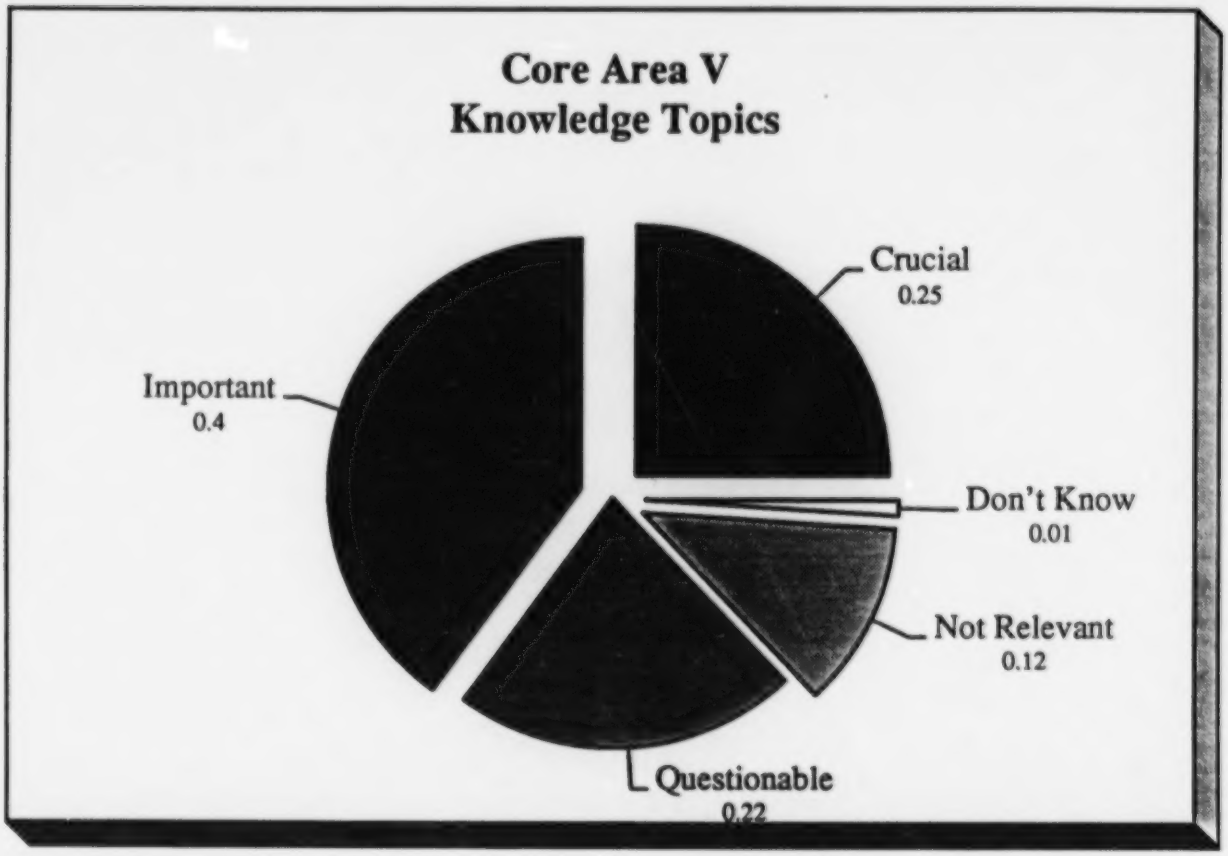

Core Area V
Knowledge Topics
Crucial
0.25
Don't Know
0.01
Not Relevant
0.12
Questionable
0.22
Important
0.4

Figure 11.

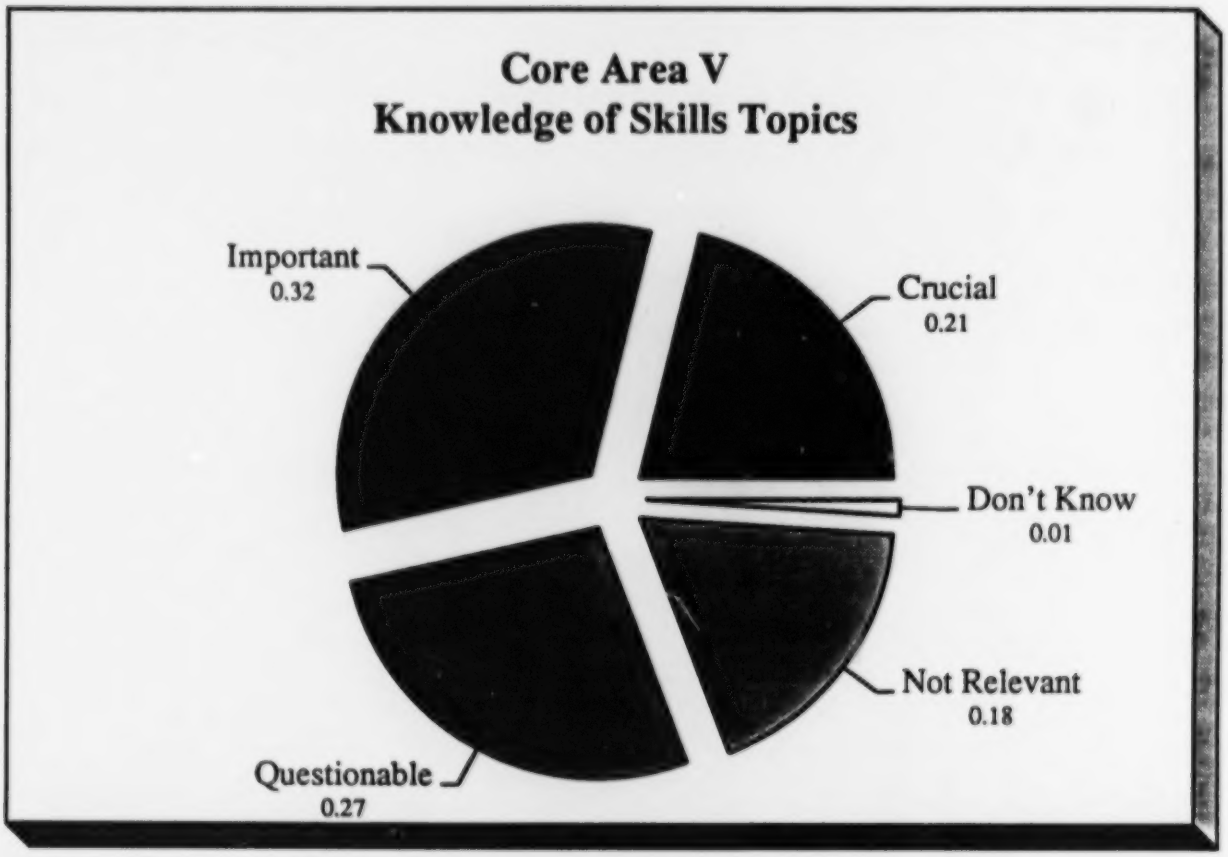

Core Area V
Knowledge of Skills Topics
Important
0.32
Crucial
0.21
Don't Know
0.01
Not Relevant
0.18
Questionable
0.27

Figure 12.

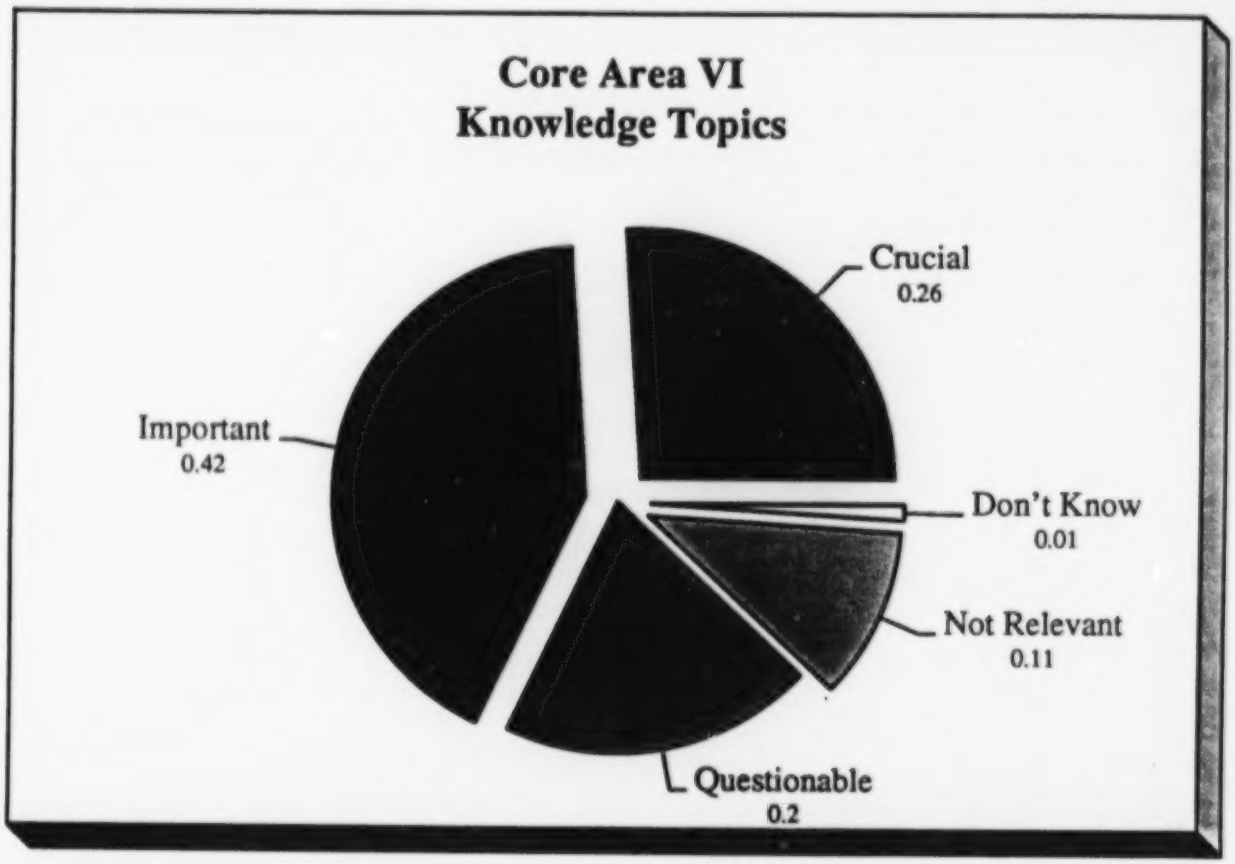

Core Area VI
Knowledge Topics
Crucial
0.26
Don't Know
0.01
Not Relevant
0.11
Questionable
0.2
Important
0.42

Figure 13.

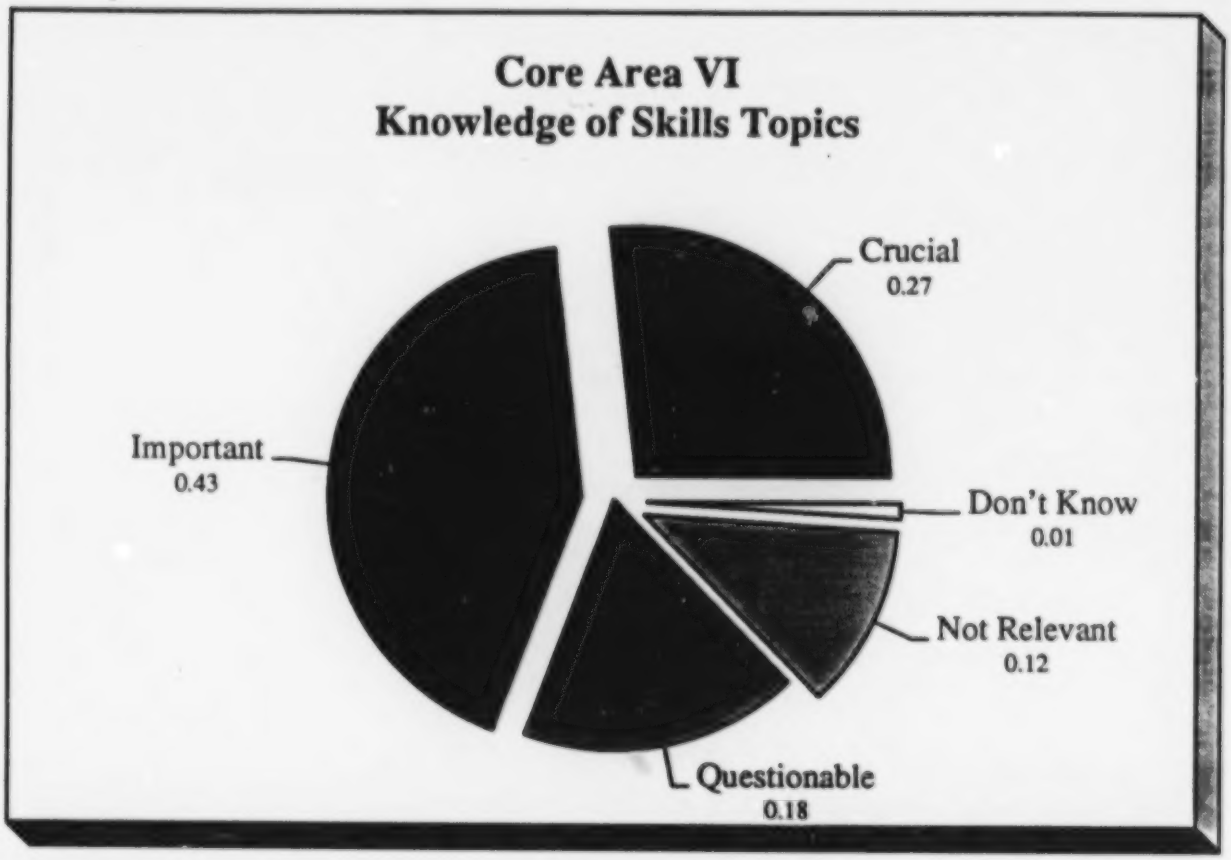

Core Area VI
Knowledge of Skills Topics
Crucial
0.27
Don't Know
0.01
Not Relevant
0.12
Questionable
0.18
Important
0.43

Figure 14.

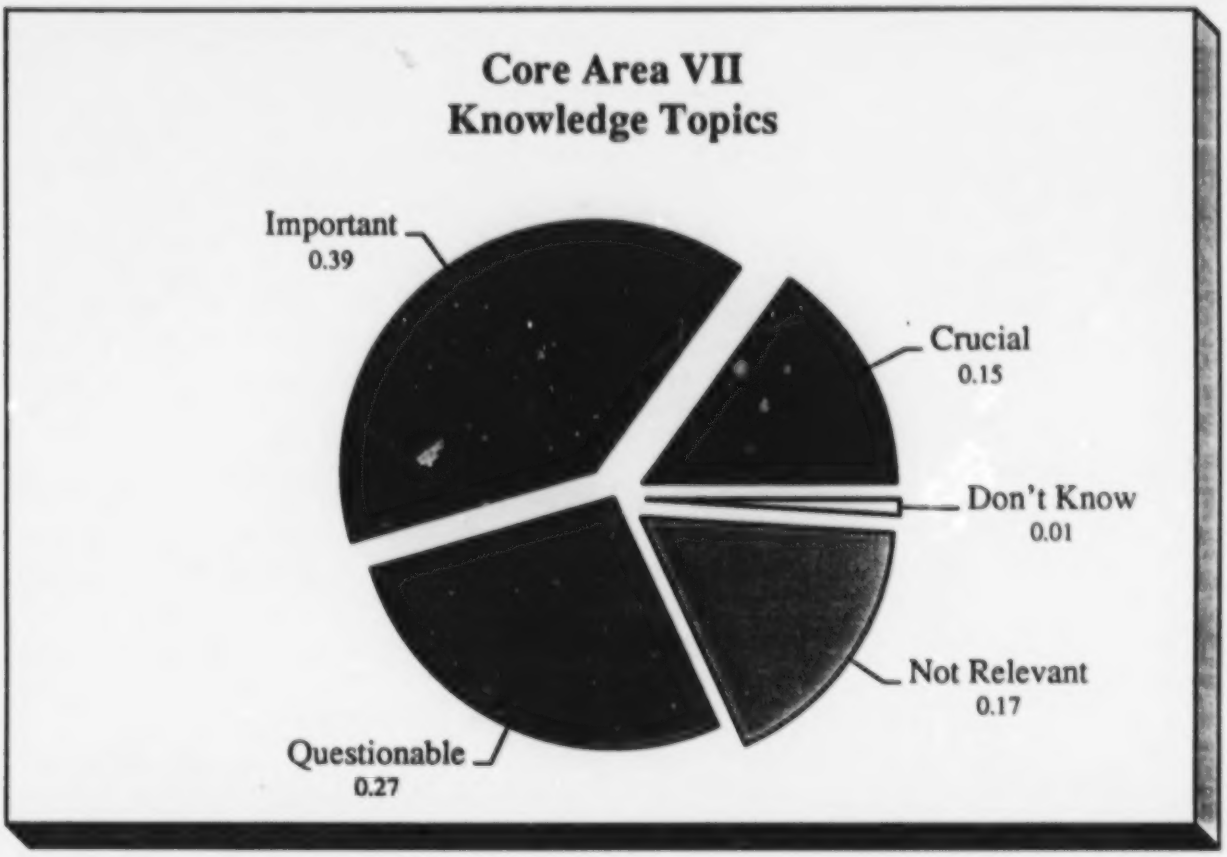

Core Area VII
Knowledge Topics
Important
0.39
Crucial
0.15
Don't Know
0.01
Not Relevant
0.17
Questionable
0.27

Figure 15.

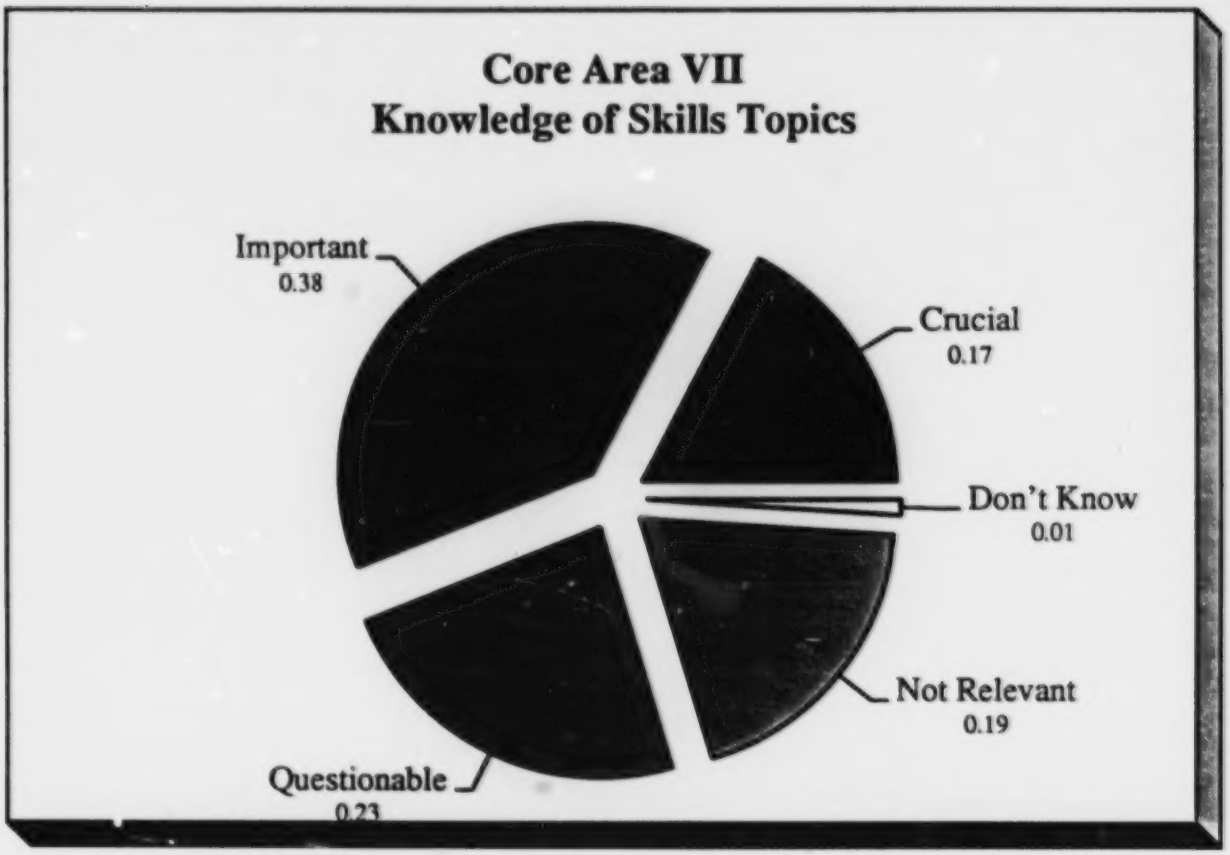

Core Area VII
Knowledge of Skills Topics
Important
0.38
Crucial
0.17
Don't Know
0.01
Not Relevant
0.19
Questionable
0.23

Figure 16.

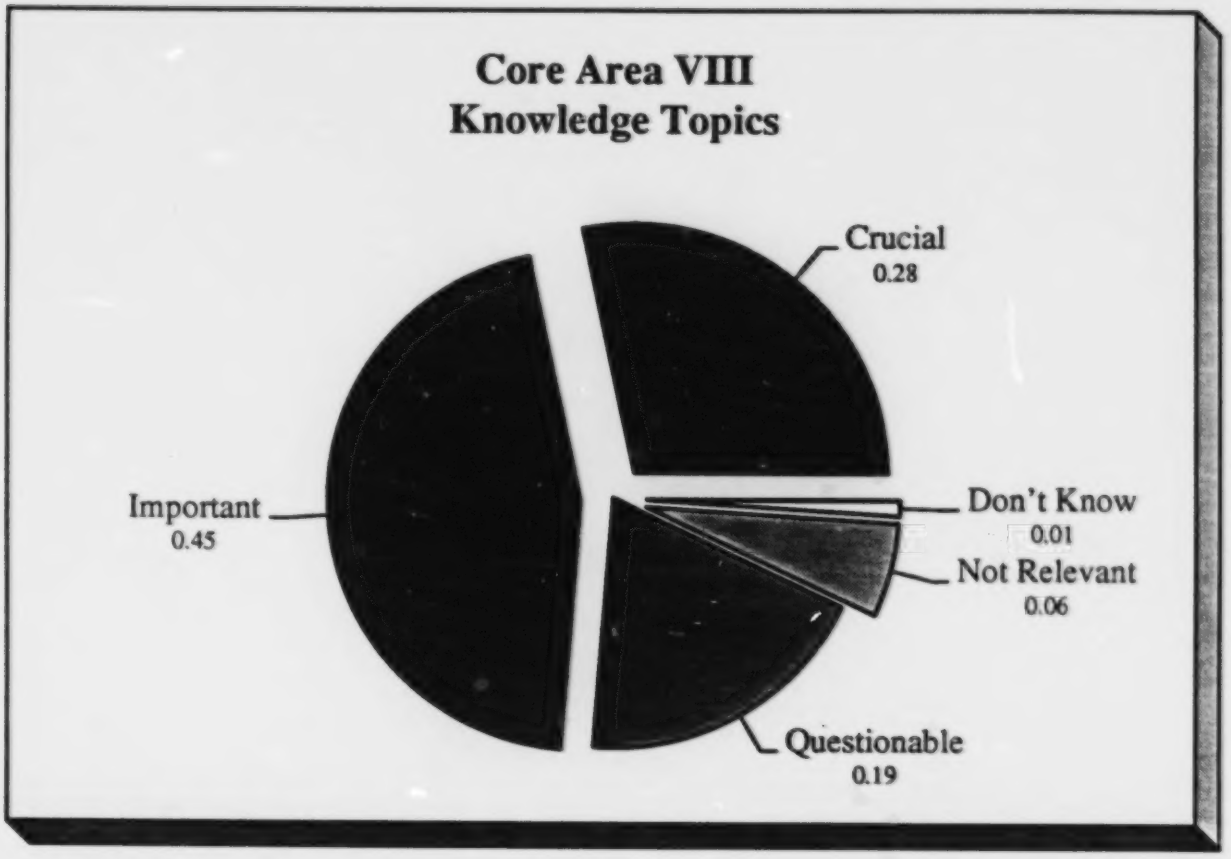

Core Area VIII
Knowledge Topics
Crucial
0.28
Don't Know
0.01
Not Relevant
0.06
Questionable
0.19
Important
0.45

Figure 17.

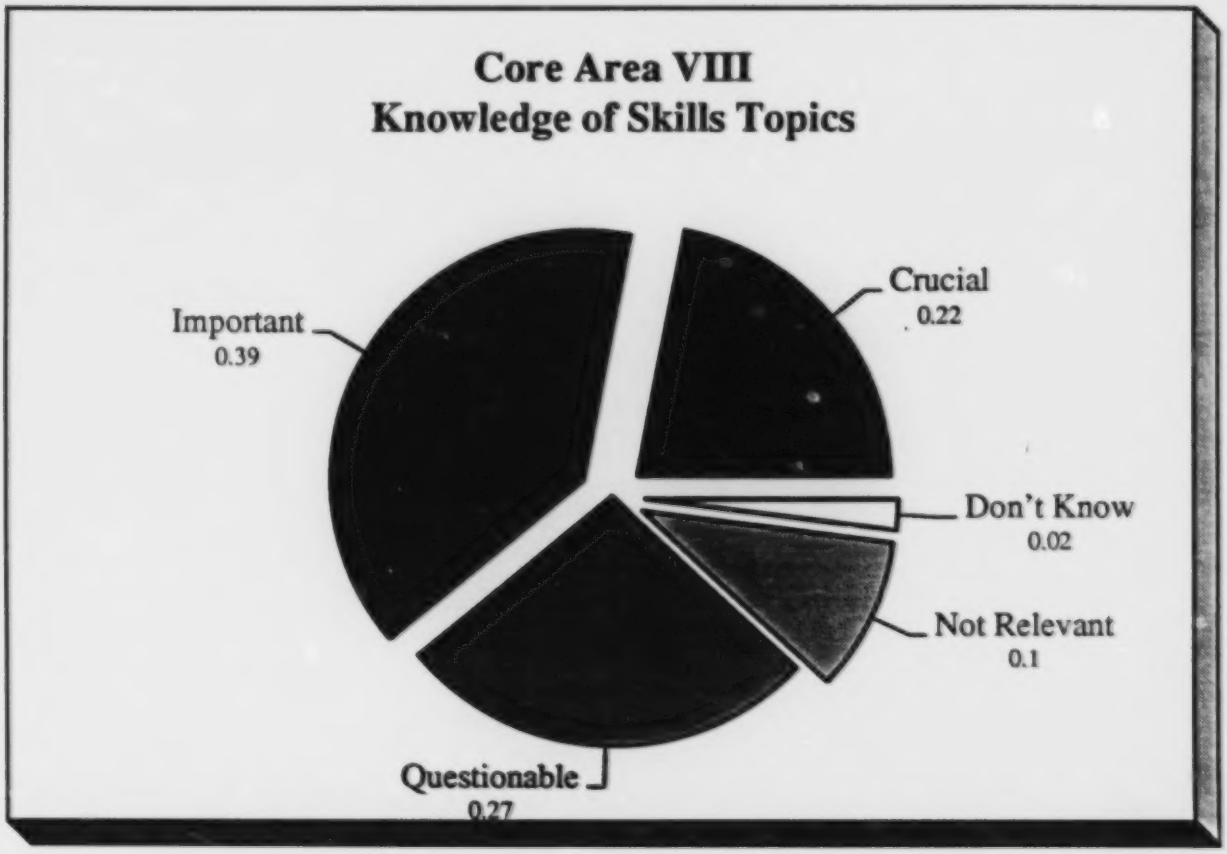
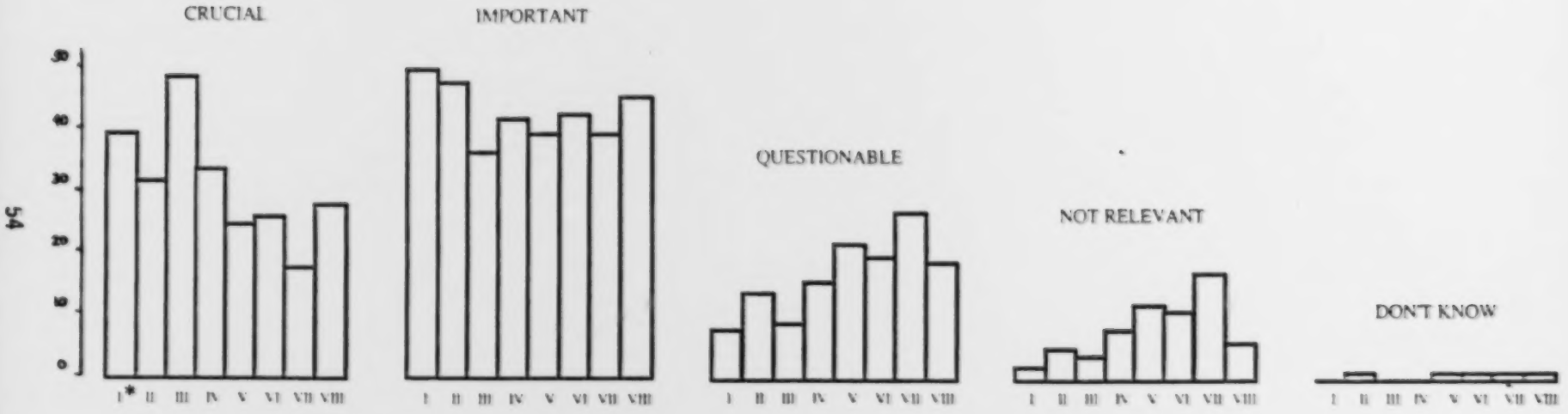
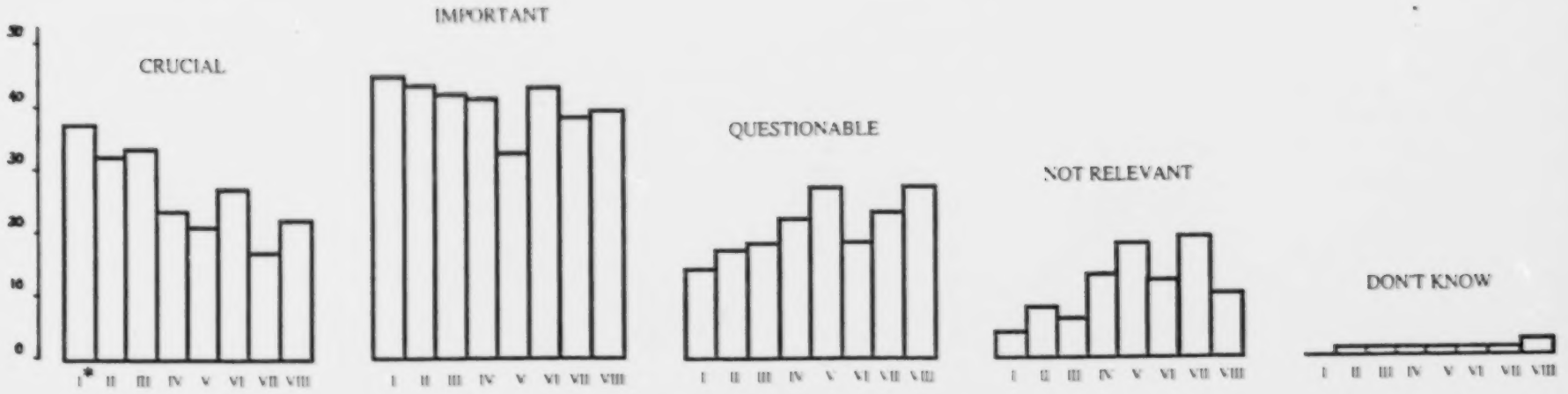

Core Area VIII
Knowledge of Skills Topics
Important
0.39
Crucial
0.22
Don't Know
0.02
Not Relevant
0.1
Questionable
0.27

Figure 18.



* Roman numerals under each clustered bar segment correspond to specific core areas in the NBCC examination.

Figure 19. Percent of relevance judgements assigned to each of five categories by counselors who judged the relevance of knowledge topics in each of the eight core areas of the NBCC examination.



55

*

Roman numerals under each clustered bar segment correspond to specific core areas in the NBCC examination.

Figure 20. Percent of relevance judgements assigned to each of five categories by counselors who judged the relevance of knowledge of skills topics in each of the eight core areas of the NBCC examination.

the "Not Relevant" category. The knowledge topics contained in Core Area I were thus judged to be relevant to their work by a very high percentage of responding counselors (See Figure 3).

Knowledge of the skills listed in Core Area I was judged to be job relevant by 82 percent of the responding counselors (Figure 4). Only 14 percent judged these topics to be of questionable relevance, and four percent judged them to be "Not Relevant." In total then, the topics in Core Area I, whether knowledge topics or topics concerned with knowledge of skills, were judged to be "Crucial" or "Important" to the jobs of more than four-fifths of the responding counselors.

Core Area II of the NBCC Examination consists of Social and Cultural Foundations topics. These topics were judged to be "Crucial" or "Important" to their work by somewhat smaller proportions of counselors, than were Core Area I topics. Yet 80 percent of the respondents placed the knowledge topics in the "Crucial" or "Important" categories (see Figure 5), and 73 percent placed the knowledge of skills topics in these categories (Figure 6). These percentages are obviously high enough to justify the inclusion of social and cultural foundations items on the NBCC Examination.

Almost half the responding counselors felt that the knowledge topics in Core Area III, Helping Relationships, were crucial to their work as practitioners (Figure 7). An additional 37 percent placed these topics in the "Important" category. No other set of topics on the NBCC Examination was judged to be as relevant.

The knowledge of skills topics in Core Area III were judged to be "Crucial" or "Important" by almost three-fourths of responding counselors, and were judged to be "Questionable" or "Not Relevant" by less than a fourth (see Figure 8). The vast majority of practicing NBCC-certified counselors thus judged knowledge of Helping Relationships to be essential to their work.

Although almost three-fourths of responding counselors judged the knowledge topics in Core Area IV, Groups, to be crucial or important to their work (as shown in Figure 9), only 64 percent of these counselors felt similarly about the knowledge of skills topics in this core area (see Figure 10). That 22 percent of the respondents placed these knowledge of skills topics in the "Questionable" category and another 13 percent placed them in the "Not Relevant" category might be cause for some concern.

Core Area V contains topics concerned with Life Style and Career Development. Although the relevance of knowledge topics and knowledge of skills topics in this core area was judged positively by a majority of responding counselors, the core area received a smaller percentage of positive ratings than did six of the seven others (These statements are supported by the results shown in Figures 11 and 12). Sixty-five percent of the respondents judged the knowledge topics to be "Crucial" or "Important" to their work, and 53 percent so judged the knowledge of skills topics. Again, it is of concern that 27 percent of the counselors' judgments of these knowledge of skills topics were in the "Questionable" category, and another 18 percent were in the "Not Relevant" category.

Responding counselors judged the relevance of topics in Core Area VI, Assessment, more positively than they did the topics in Core Area V (see Figures 13 and 14). About seven in ten of the counselors' judgments of knowledge topics and knowledge of skills topics were placed in the "Crucial" or "Important" categories. Fewer than 12 percent of responding counselors judged these topics to be "Not Relevant." Testing knowledge of assessment on the NBCC Examination is therefore clearly warranted, in the judgment of these counselors.

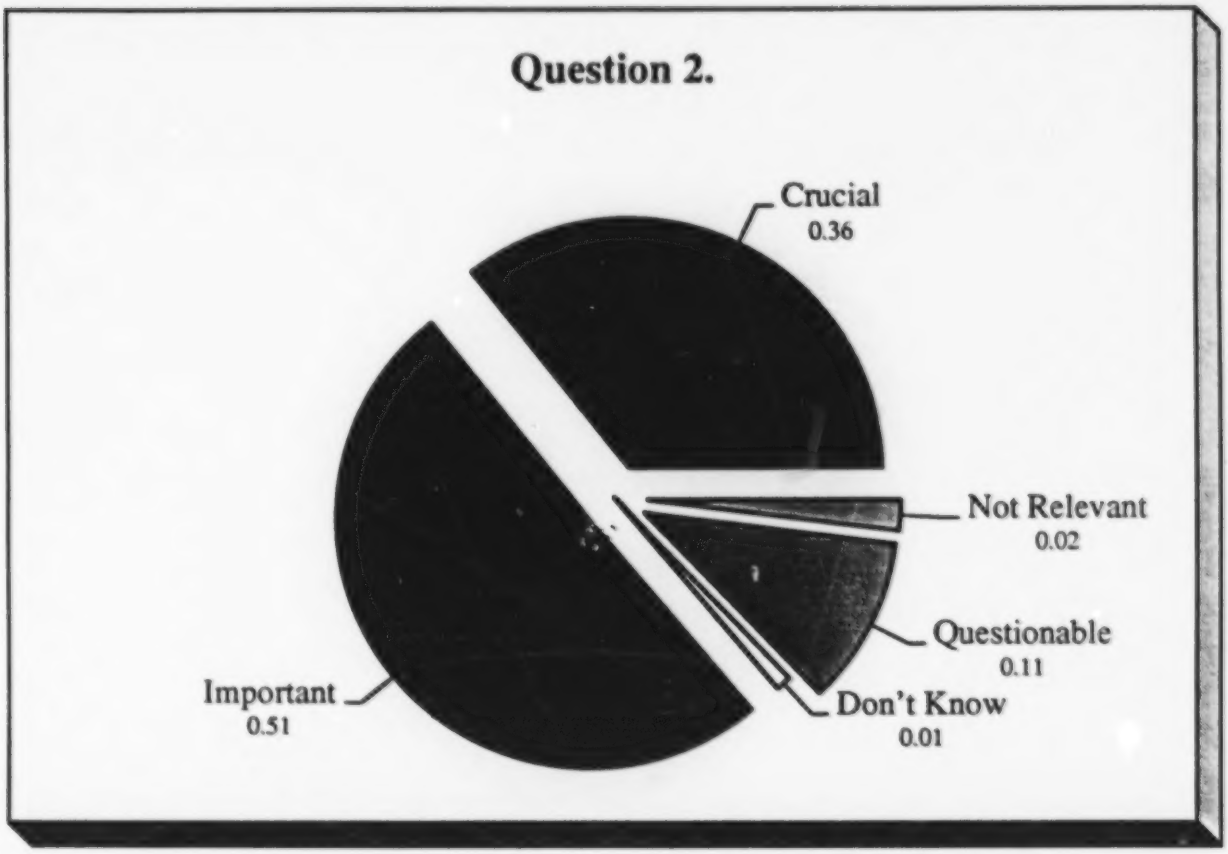
Core Area VII, which contains topics on Research and Evaluation, was judged to be relevant to their work by the smallest number of responding counselors. Fifty-five percent of the judgments of knowledge topics in this core area were placed in the "Crucial" or "Important" categories, but 27 percent of the counselors' judgments were in the "Questionable" category and another 17 percent were in the "Not Relevant" category (see Figure 15).

Judgments of the knowledge of skills topics in Core Area VII were only slightly more positive than were judgments of the knowledge topics. Fifty-six percent of the judgments were in the "Crucial" or "Important" categories, and 43 percent were in the "Questionable" or "Not Relevant" categories (these results are shown in Figure 16). Although a majority of the judgments of responding counselors concerning the job relevance of research and evaluation topics were positive, the fact that almost one in five of these judgments were in the "Not Relevant" category suggests that certification expectations and practice in this area are incongruent for some counselors.

Nearly three-fourths of the counselors' judgments of knowledge topics in Core Area VIII, Professional Orientation, were in the "Crucial" or "Important" categories (see Figure 17). Since only six percent of the counselors' judgments were placed in the "Not Relevant" category, the importance of these topics to the professional work of most counselors is clear.

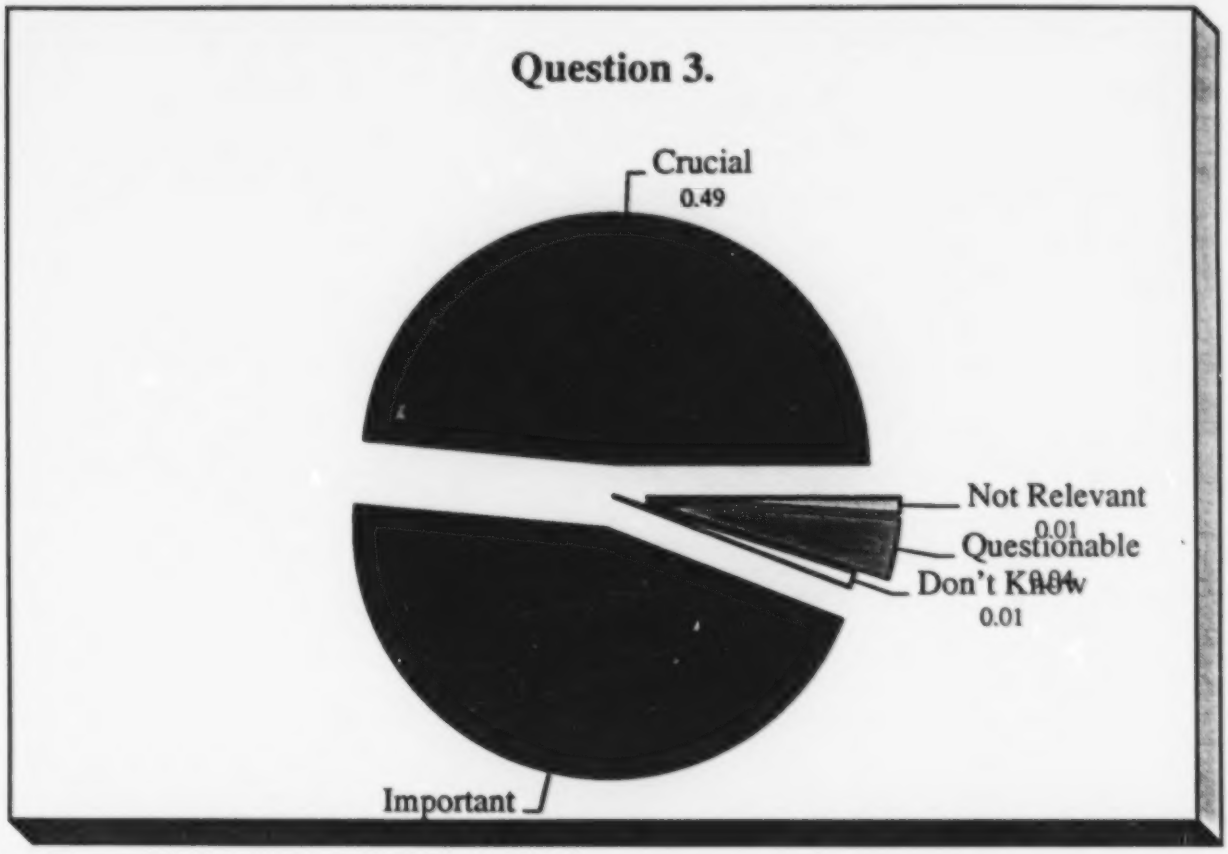
The knowledge of skills topics in Core Area VIII were not judged as positively as the knowledge topics, but 61 percent of the counselors' judgments were placed in the "Crucial" or "Important" categories nonetheless (This finding is shown in Figure 18). It should be noted that 27 percent of the counselors' judgments of these knowledge of skills topics were in the "Questionable" category and another 10 percent were in the "Not Relevant" category, suggesting that judgments of the relevance of these topics were far from uniform.

Distributions of judgments of the relevance of individual topics assessed by the NBCC Examination are shown in Figures 21 through 132. These results for individual topics are summarized in the line graph shown in Figure 133. These figures clearly indicate that there was great variation in the judged relevance of individual topics assessed by the NBCC Examination. For example, nearly half the respondents thought that knowledge of self-concept development and evolution was "Crucial," and another 46 percent thought it was "Important" (see Figure 22). Sixty-two percent of respondents judged knowledge of the skill of applying "basic and advanced skills in helping processes" to be "Crucial,"



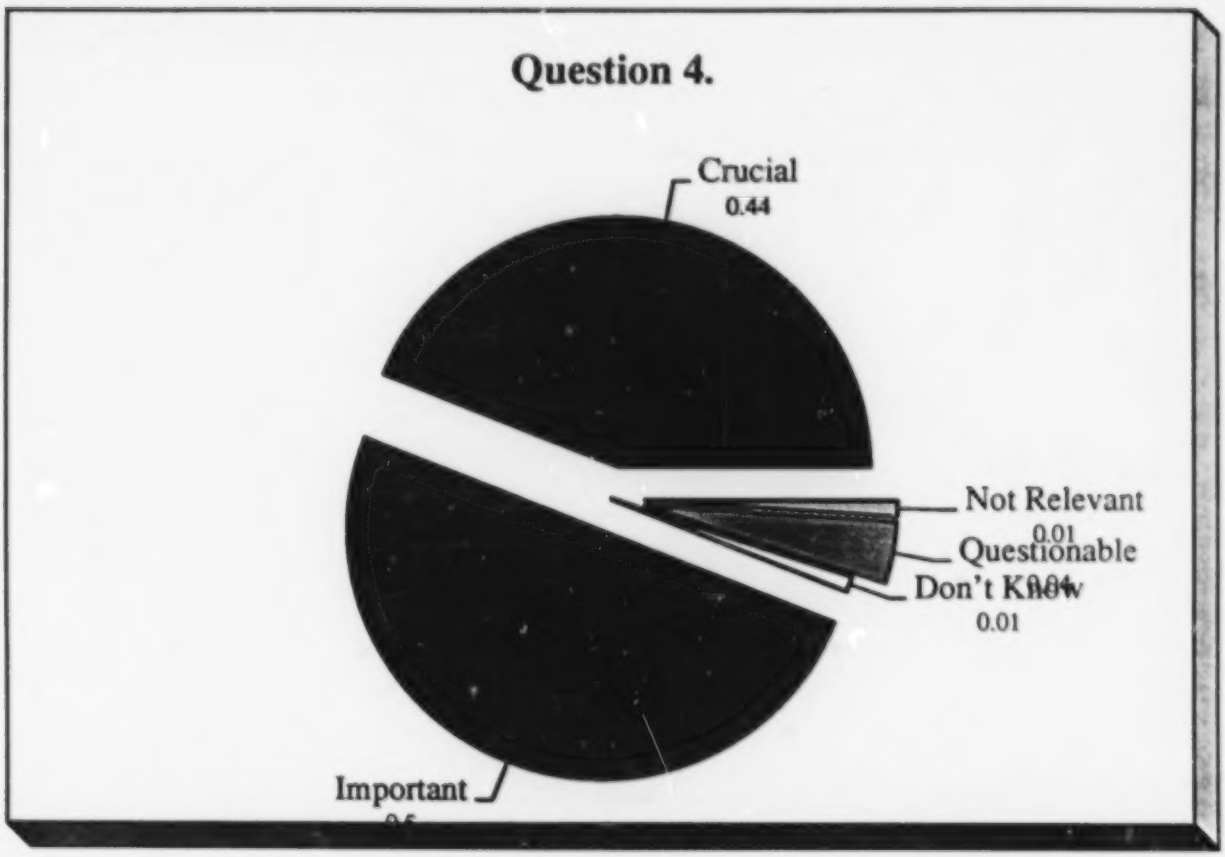
How relevant is knowledge in the area, life span theories of physiological, intellectual, emotional, attitudinal, and social human development, including proponents and behavioral indicators, to the work you do as a practicing counselor?

Figure 21.



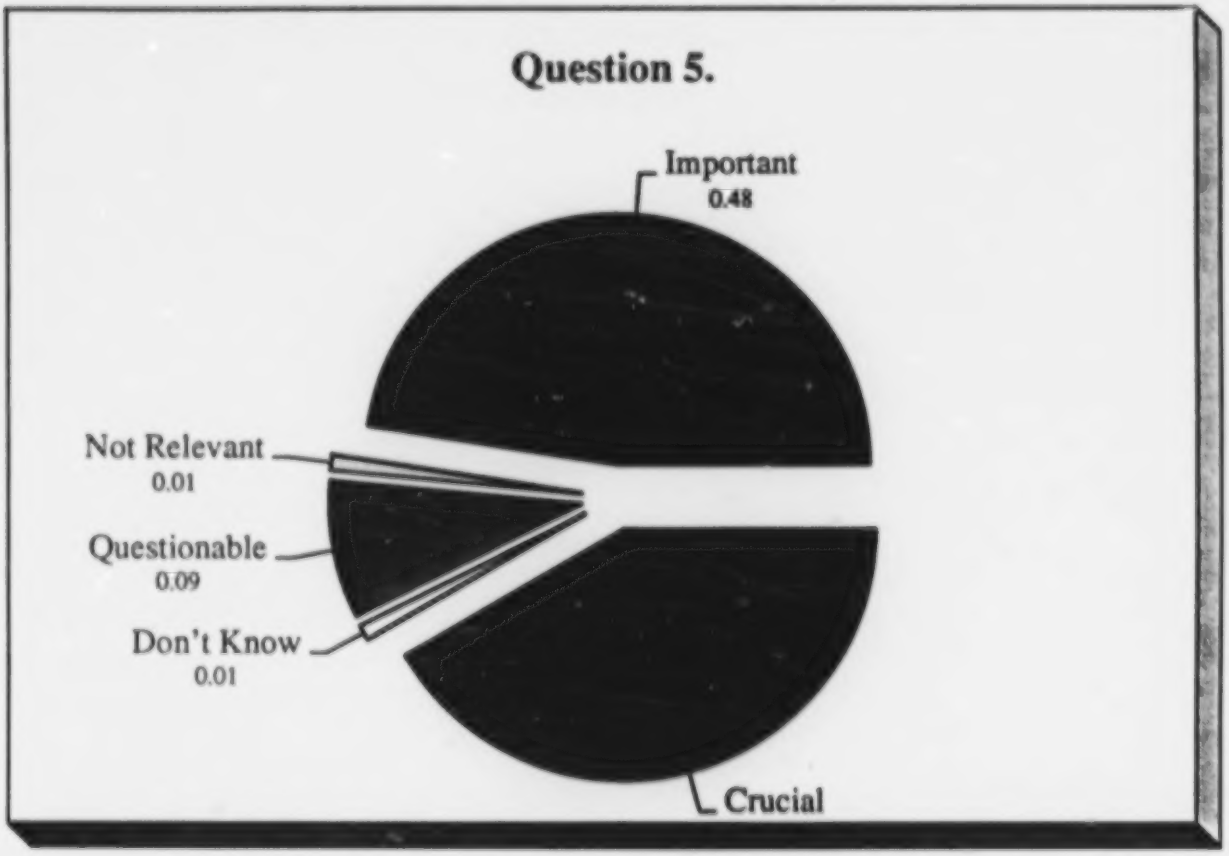
How relevant is knowledge in the area, self-concept development and evolution, including major theories, proponents, influencing factors, and behavioral indicators, to the work you do as a practicing counselor?

Figure 22.



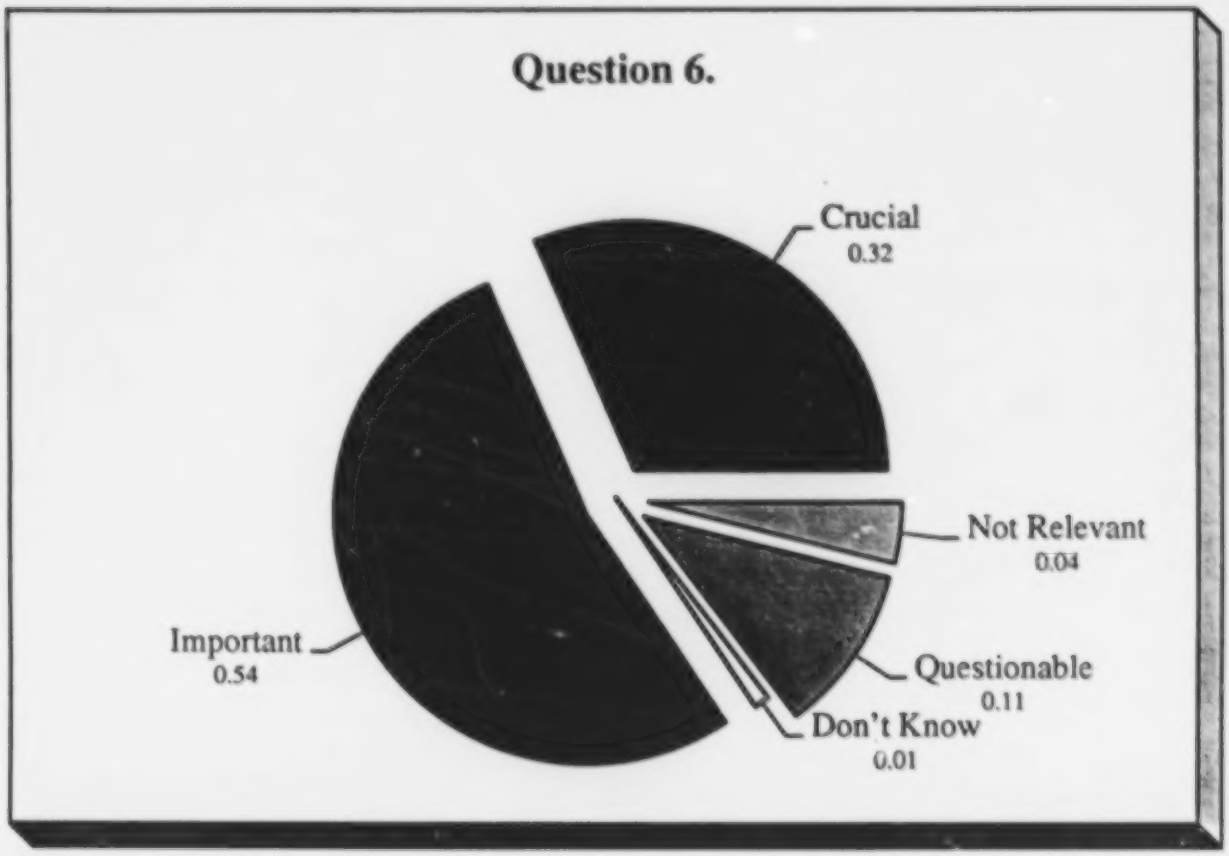
How relevant is knowledge in the area, personality development and evolution, including major theories, proponents, influencing factors, and behavioral indicators, to the work you do as a practicing counselor?

Figure 23.



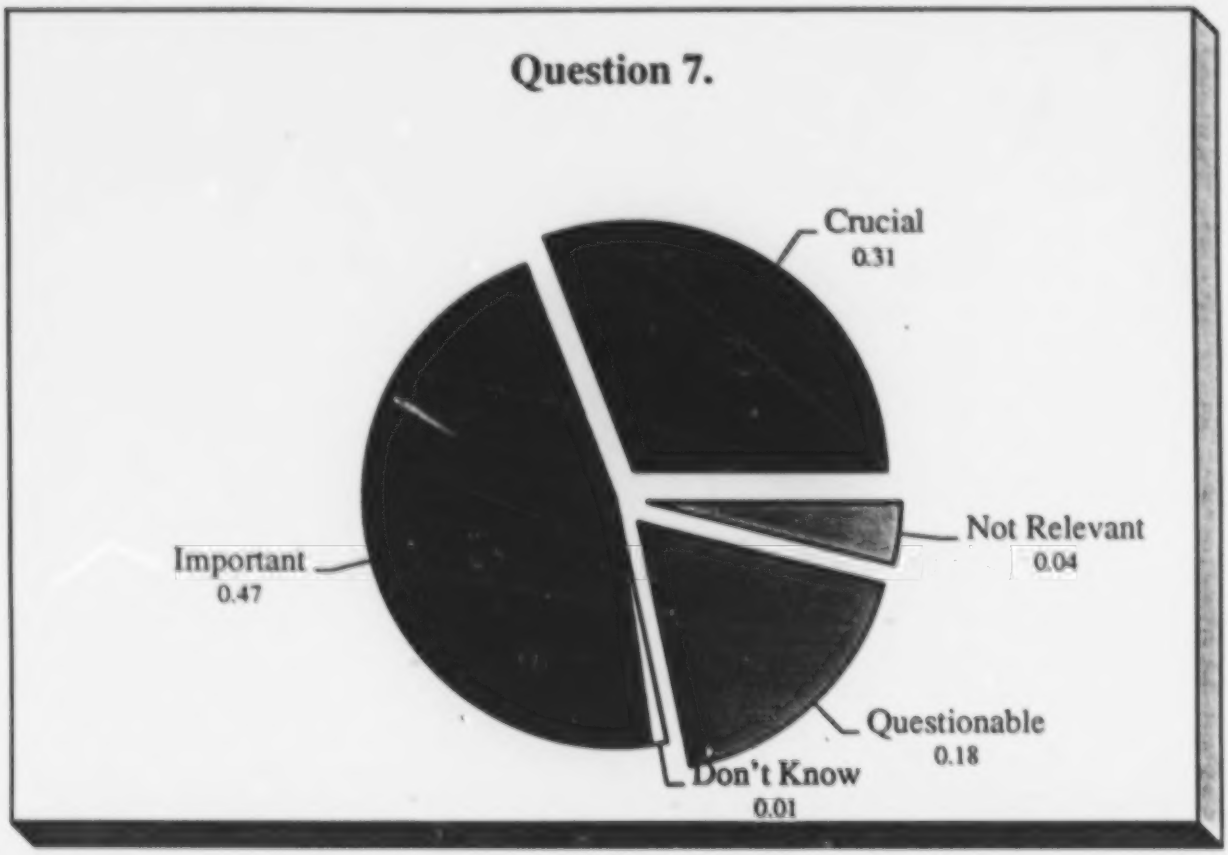
How relevant is knowledge in the area, normal and abnormal human behavior, including primary psychological and sociological characteristics and behavioral indicators, to the work you do as a practicing counselor?

Figure 24.



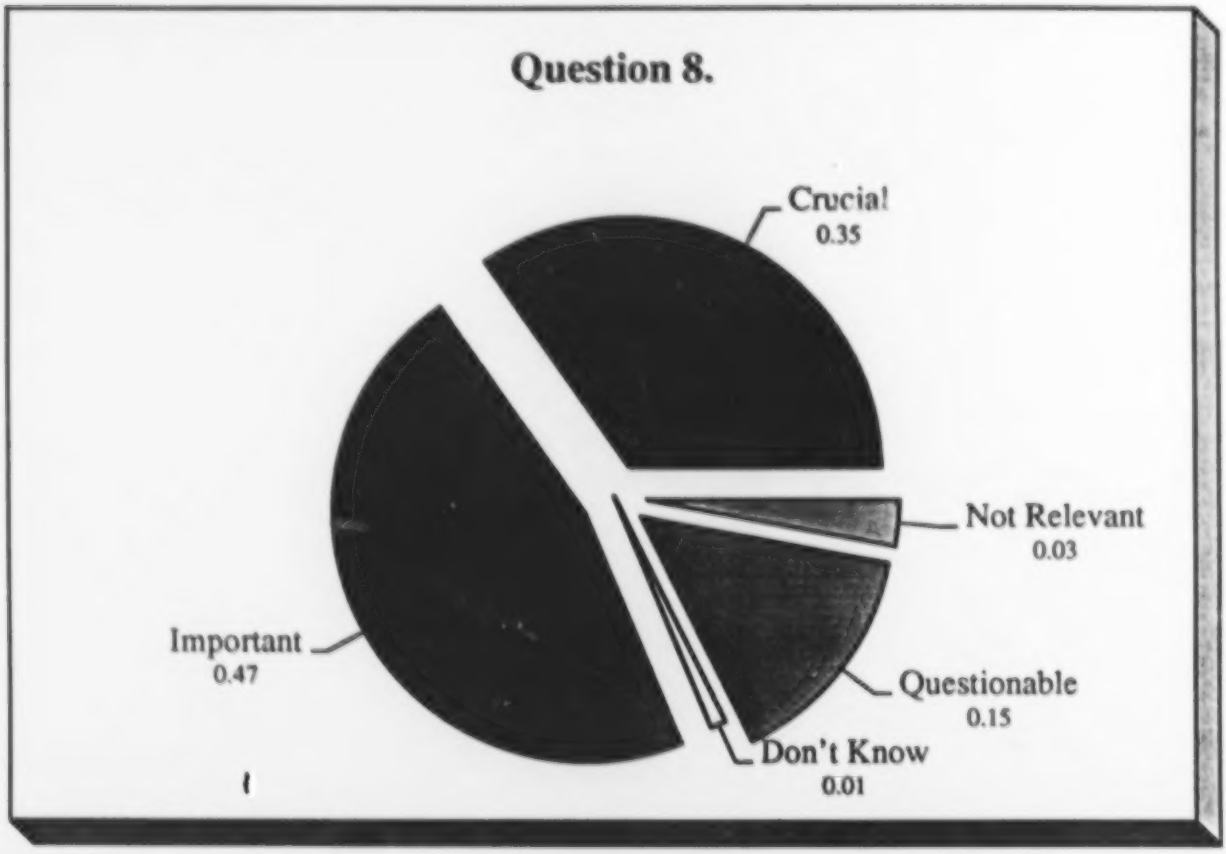
How relevant is knowledge in the area, learning theory, including major theories, proponents, characteristics, factors influencing applications, and behavioral indicators, to the work you do as a practicing counselor?

Figure 25.



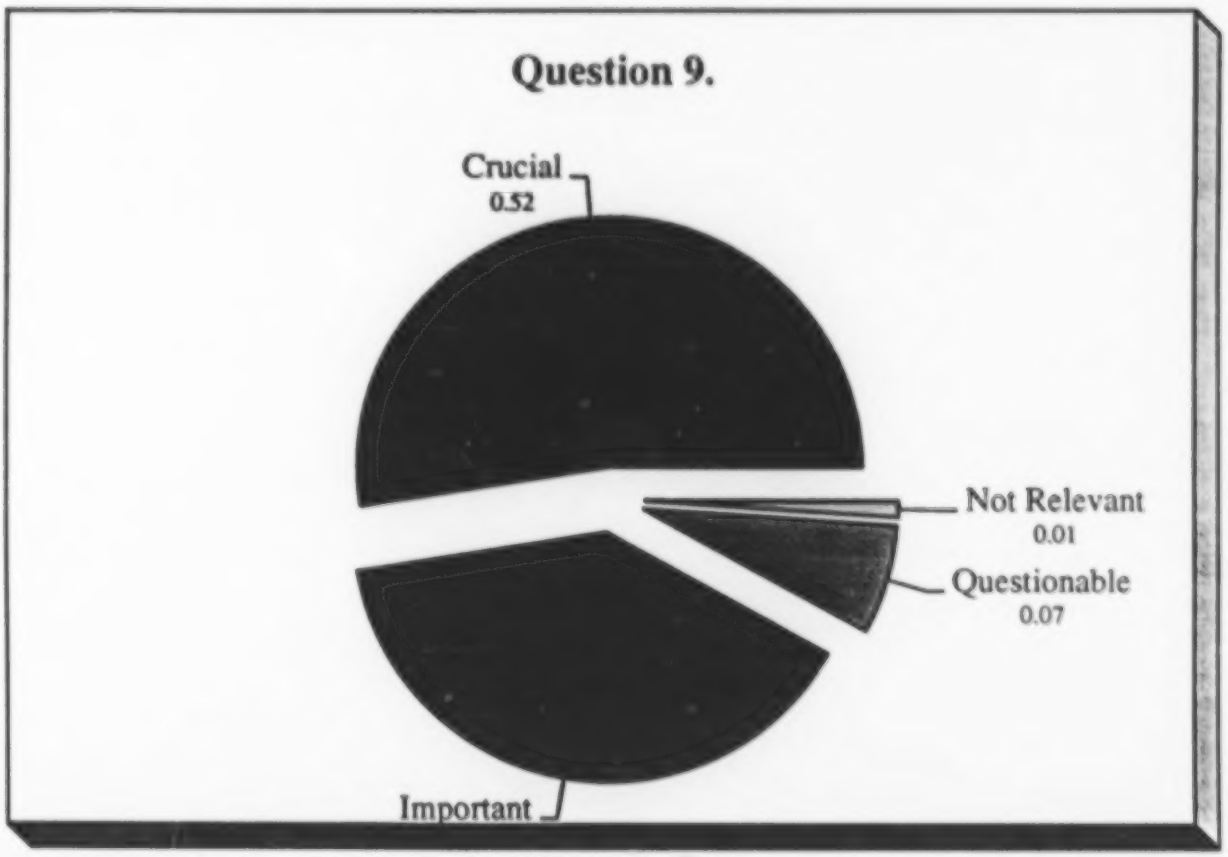
How relevant is knowledge in the area, knowing how to identify and explain, in operational terms, an individual's psychological and social points of development, using major life-span theories of human growth and development, to the work you do as a practicing counselor?

Figure 26.



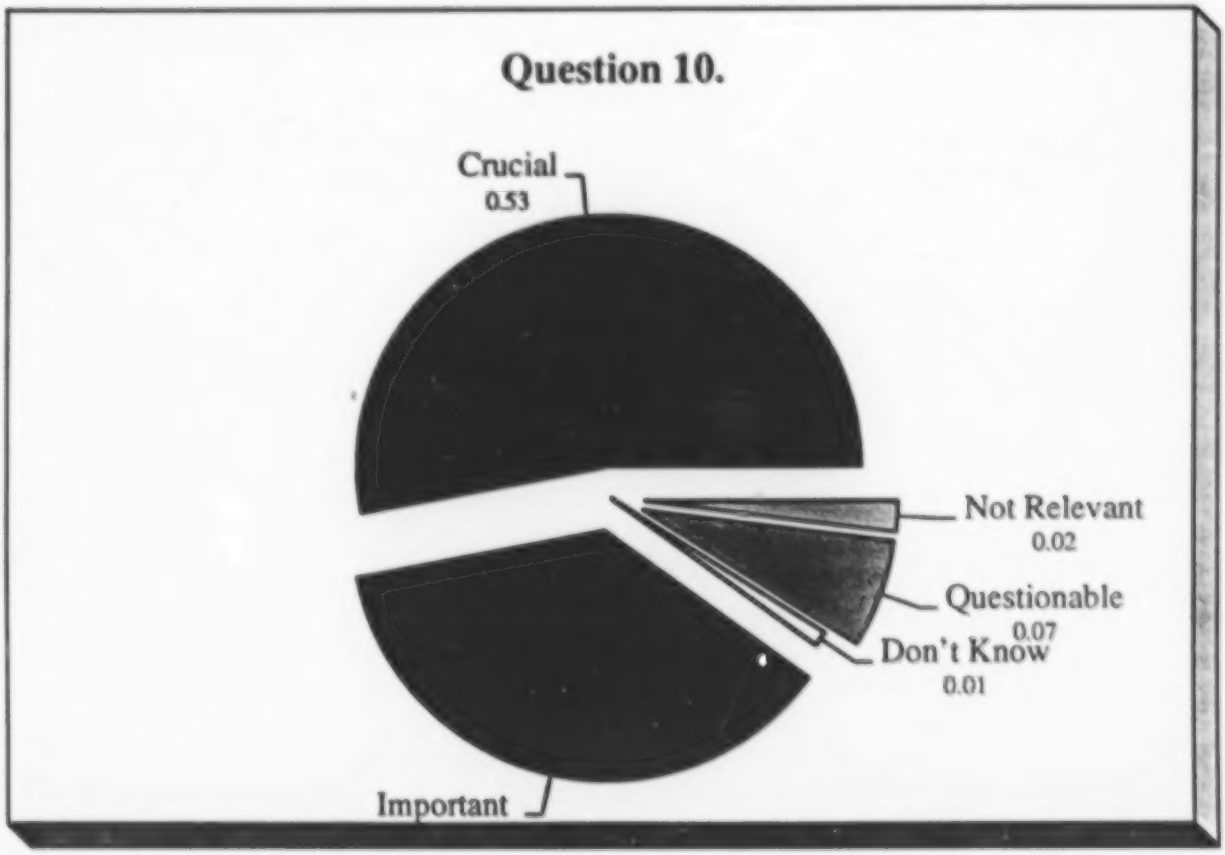
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to apply principles of major life-span theories of human growth and development to facilitate change in an individual?

Figure 27.



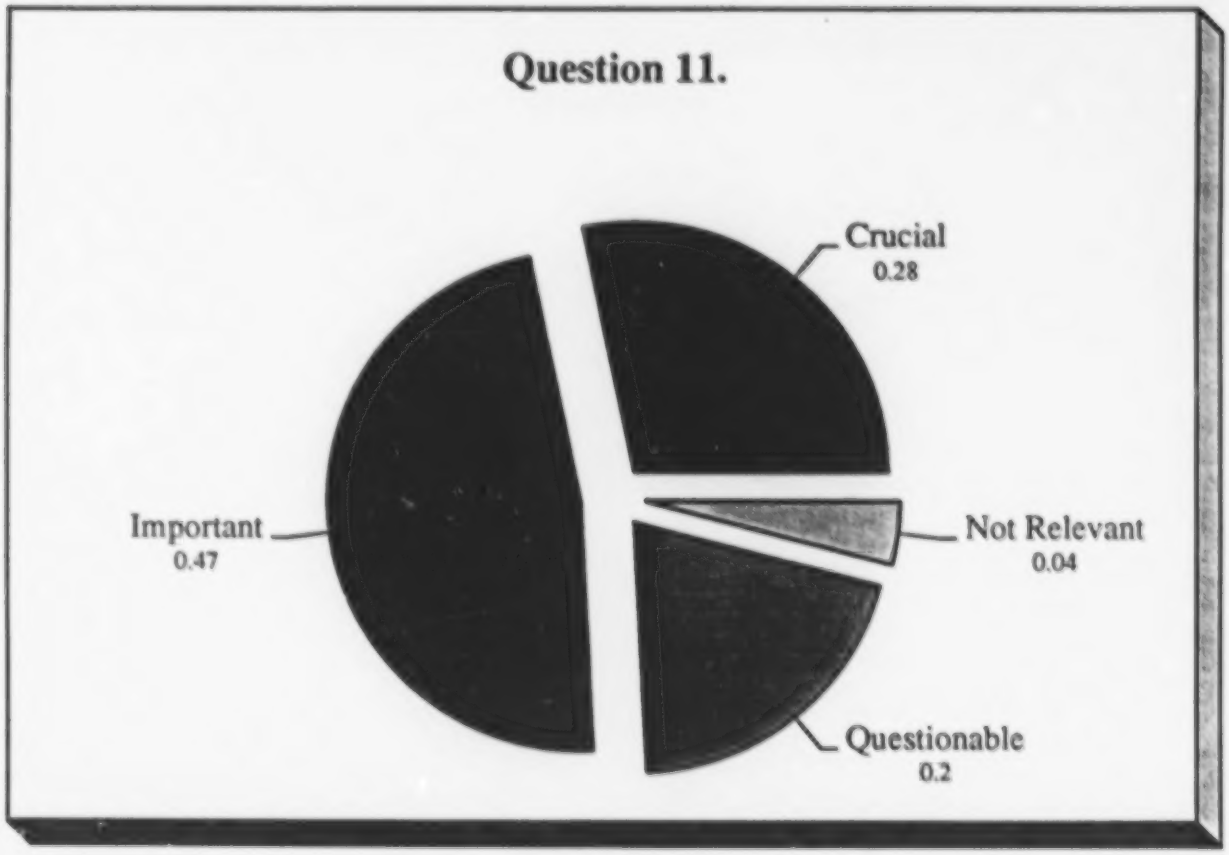
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to explain, in operational terms, an individual's current self-concept?

Figure 28.



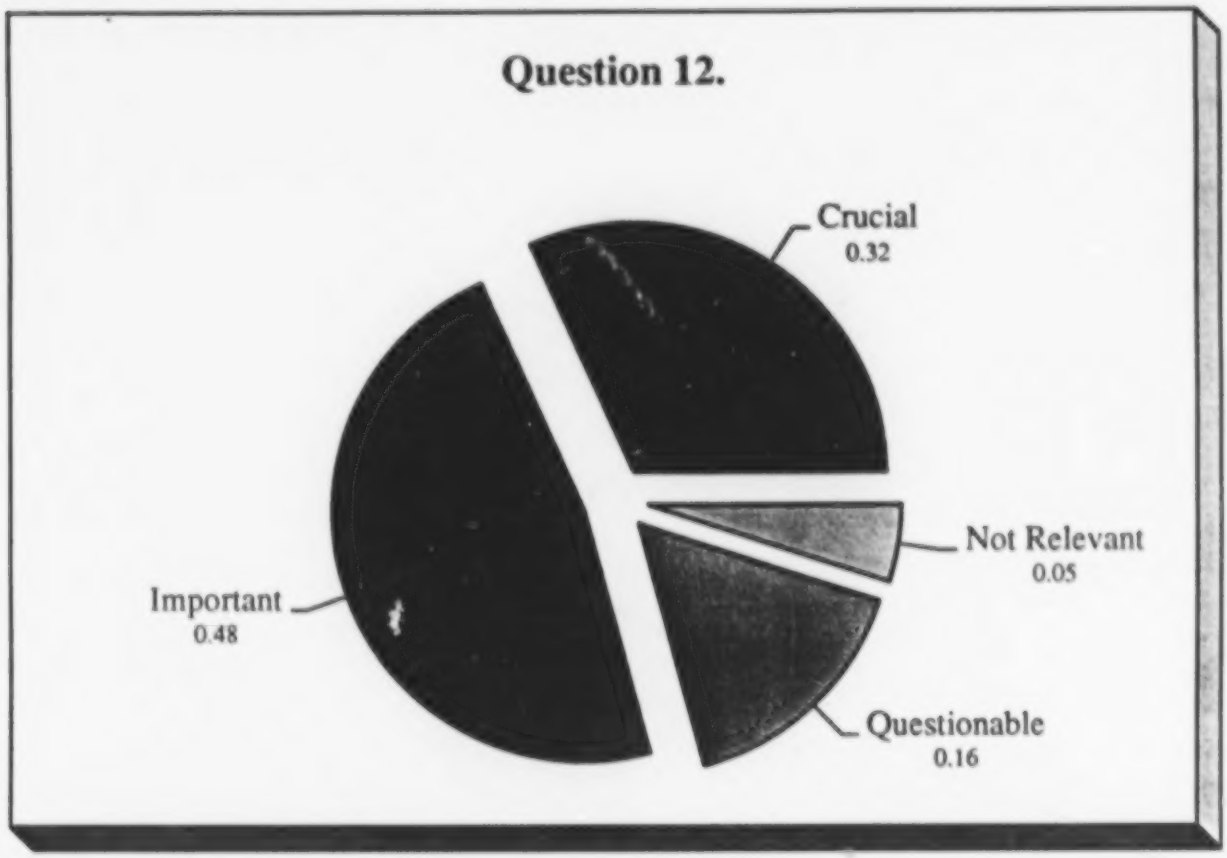
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to apply principles of self-concept theories to facilitate improvement of an individual's self-concept?

Figure 29.



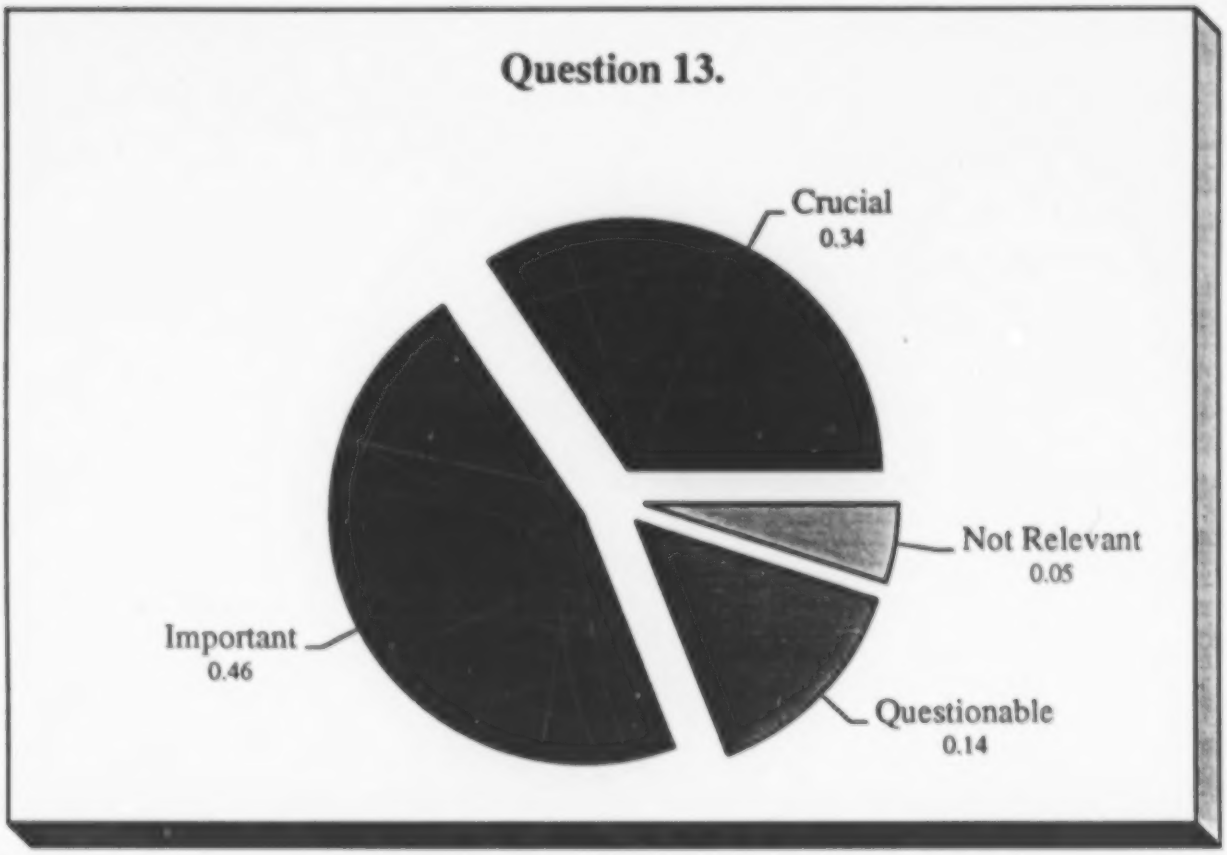
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to characterize, in operational terms, an individual's personality, using major personality theories?

Figure 30.



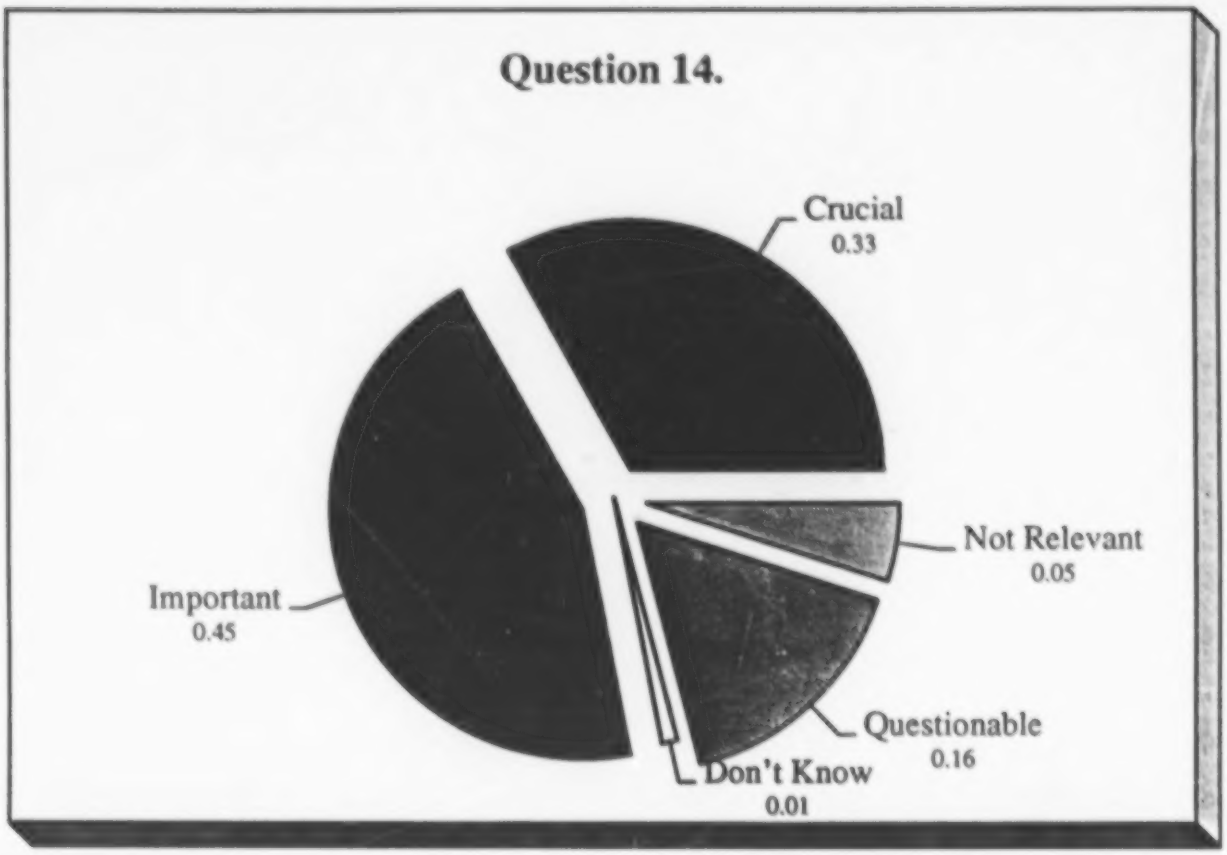
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to apply principles of major personality theories to facilitate change in an individual's personality?

Figure 31.



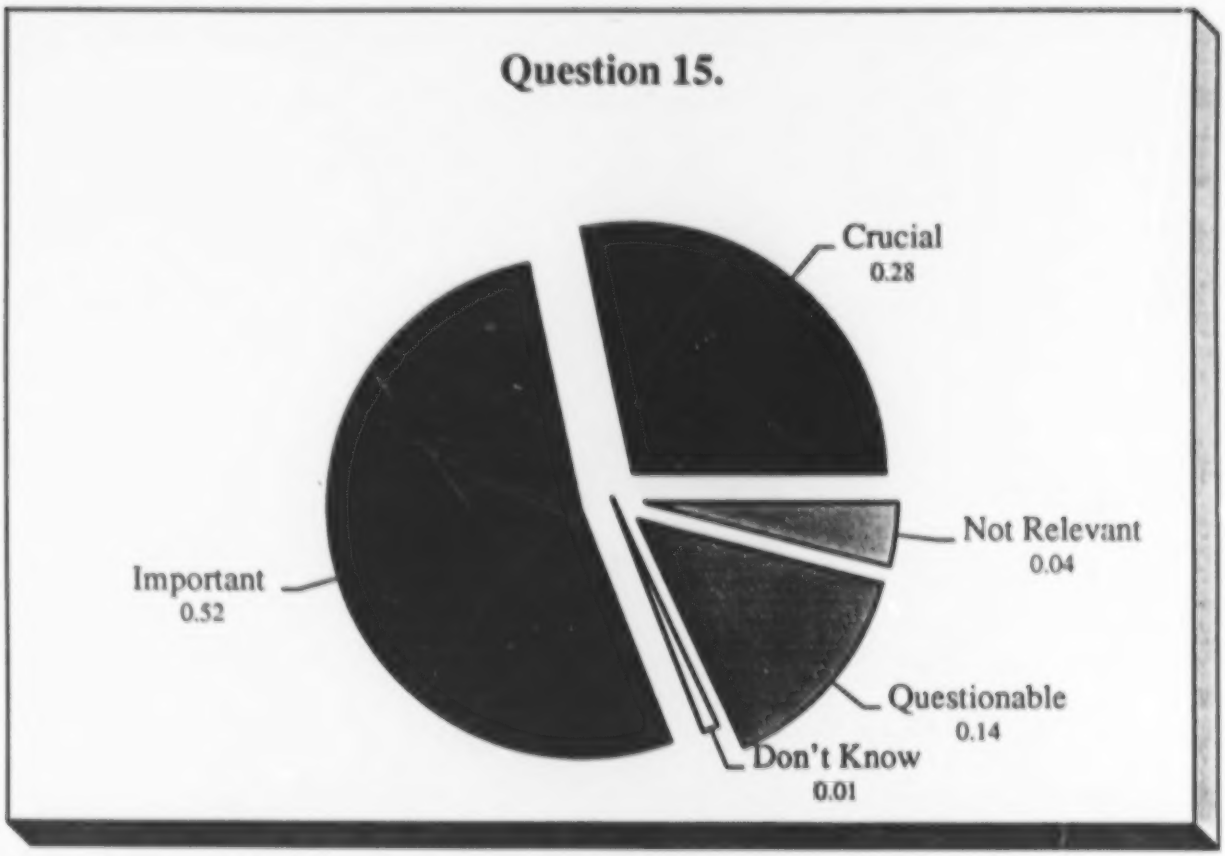
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to identify and explain, in operational terms, abnormal (e.g., deviant, pathological or sociopathic) behavior?

Figure 32.



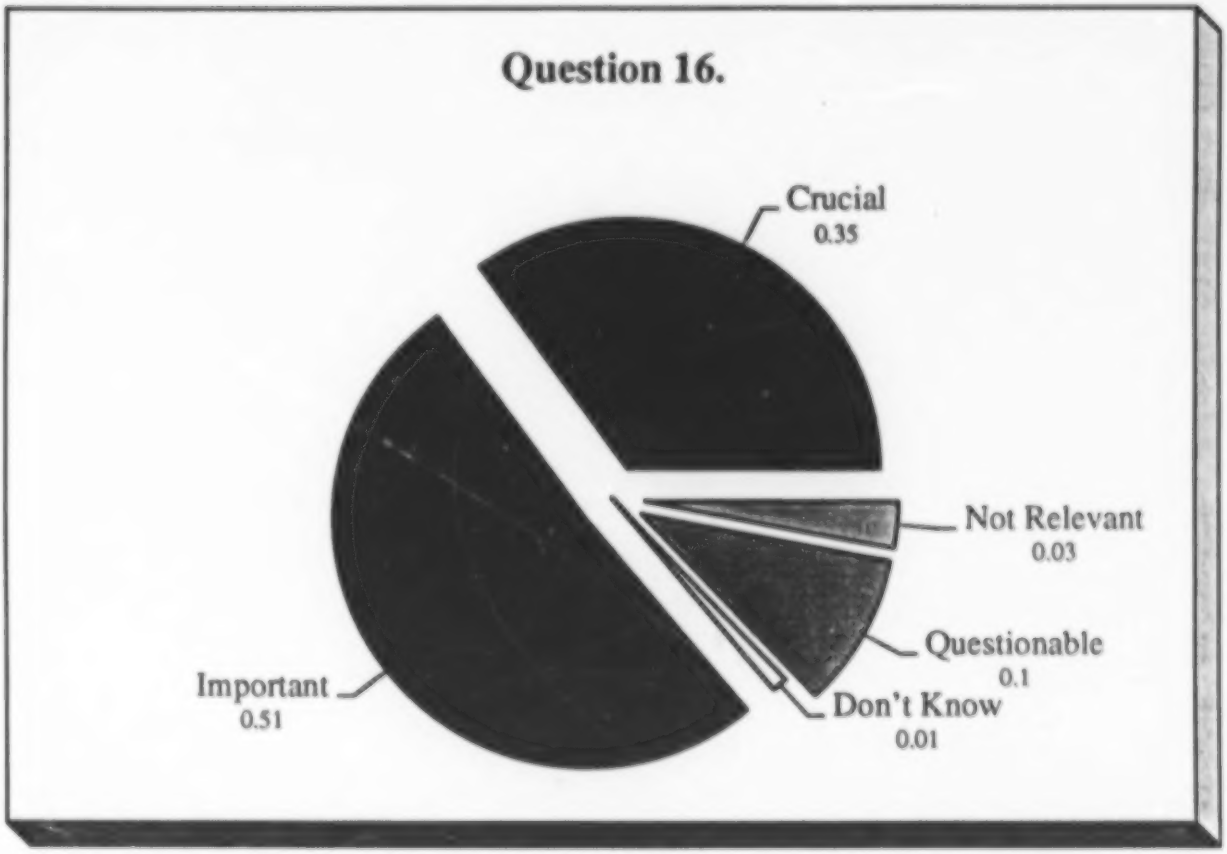
How relevant to the work you do as a practicing counselor is knowledge of the skill: knowing how to apply principles of major learning theories to facilitate change in individuals?

Figure 33.



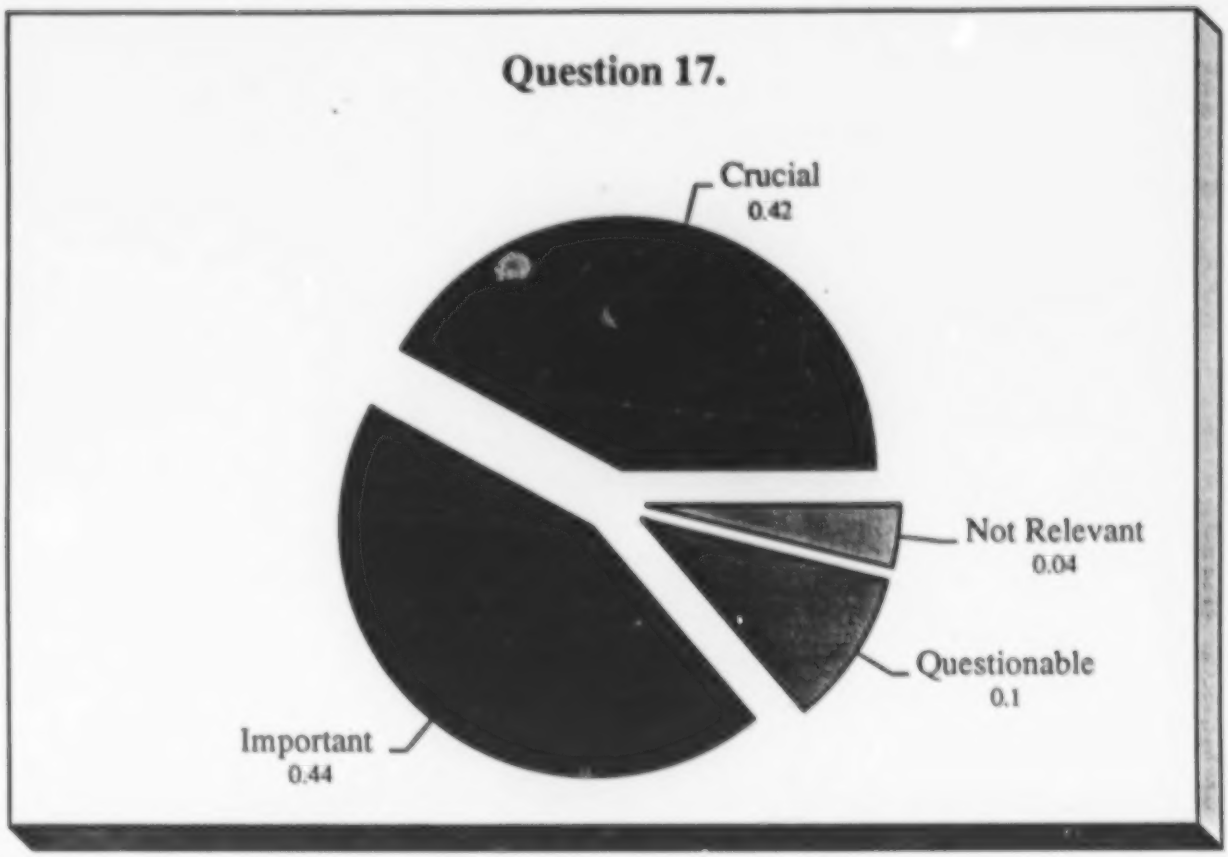
How relevant is knowledge in the area, trends and changes in society, including educational, political, sociological, economic, and technological influences, conflicts within society, methods of conflict resolution, and responses to change, to the work you do as a practicing counselor?

Figure 34.



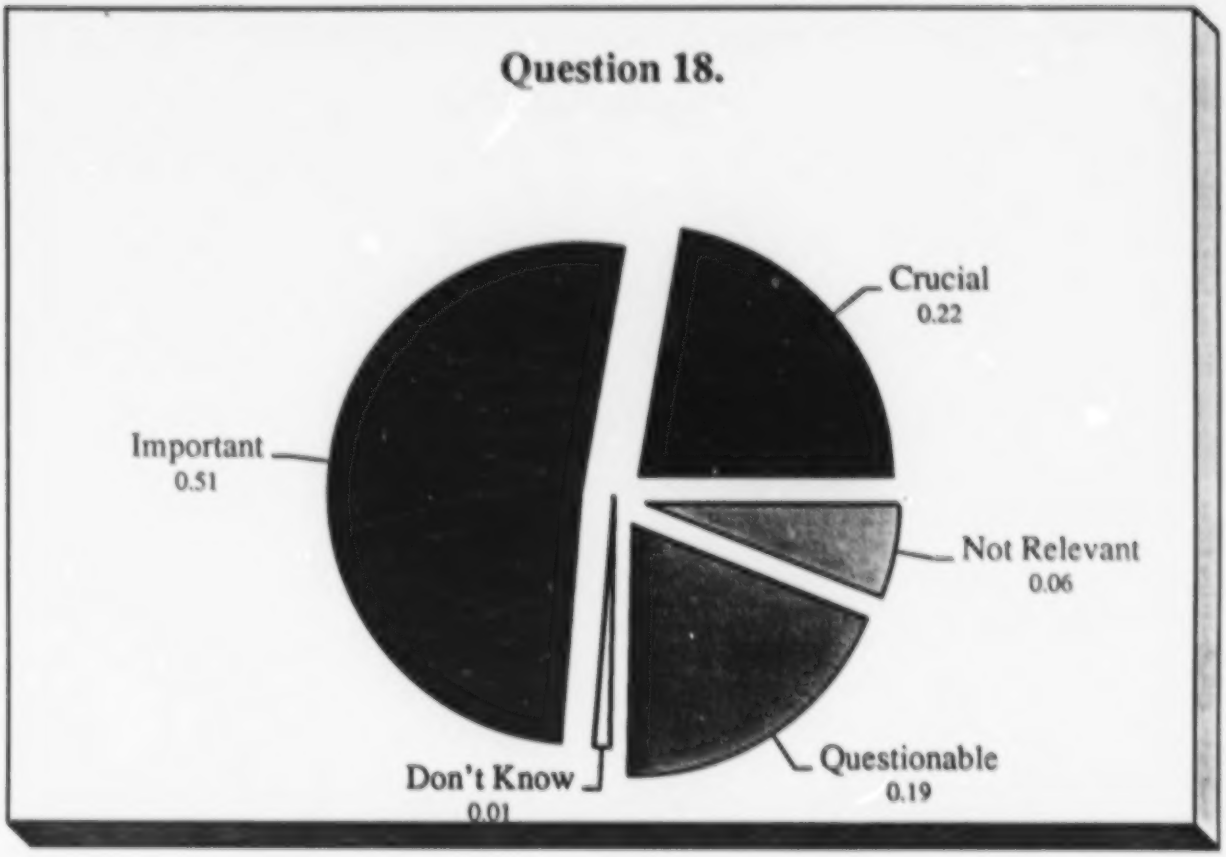
How relevant is knowledge in the area, trends and changes in human roles, including traditional and non-traditional male and female roles, factors influencing role development, role conflict, and methods of conflict resolution, to the work you do as a practicing counselor?

Figure 35.



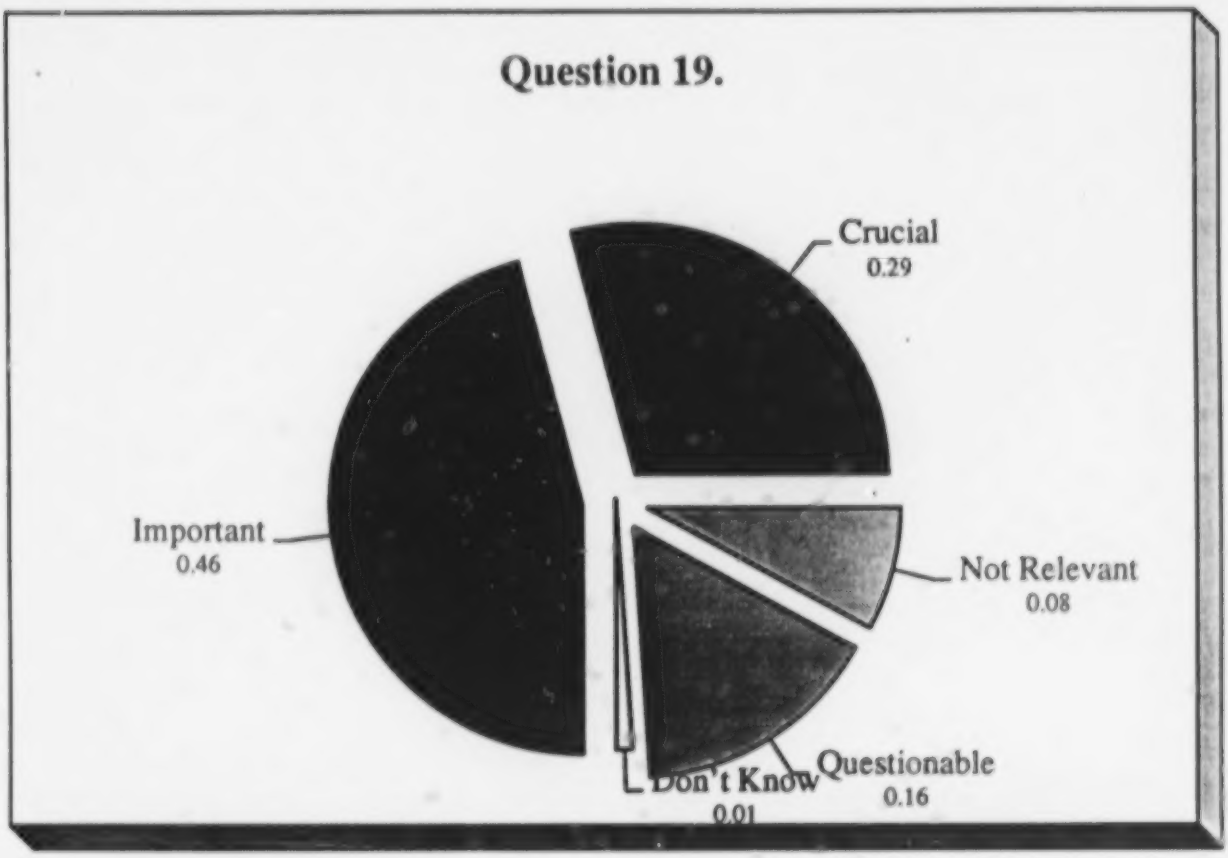
How relevant is knowledge in the area, marital/familial situations and trends, including traditional and non-traditional situations, effective and ineffective marital/familial interactions, factors influencing interactions and relationships, methods of marital/familial conflict resolution, and parent, child, and sibling roles, to the work you do as a practicing counselor?

Figure 36.



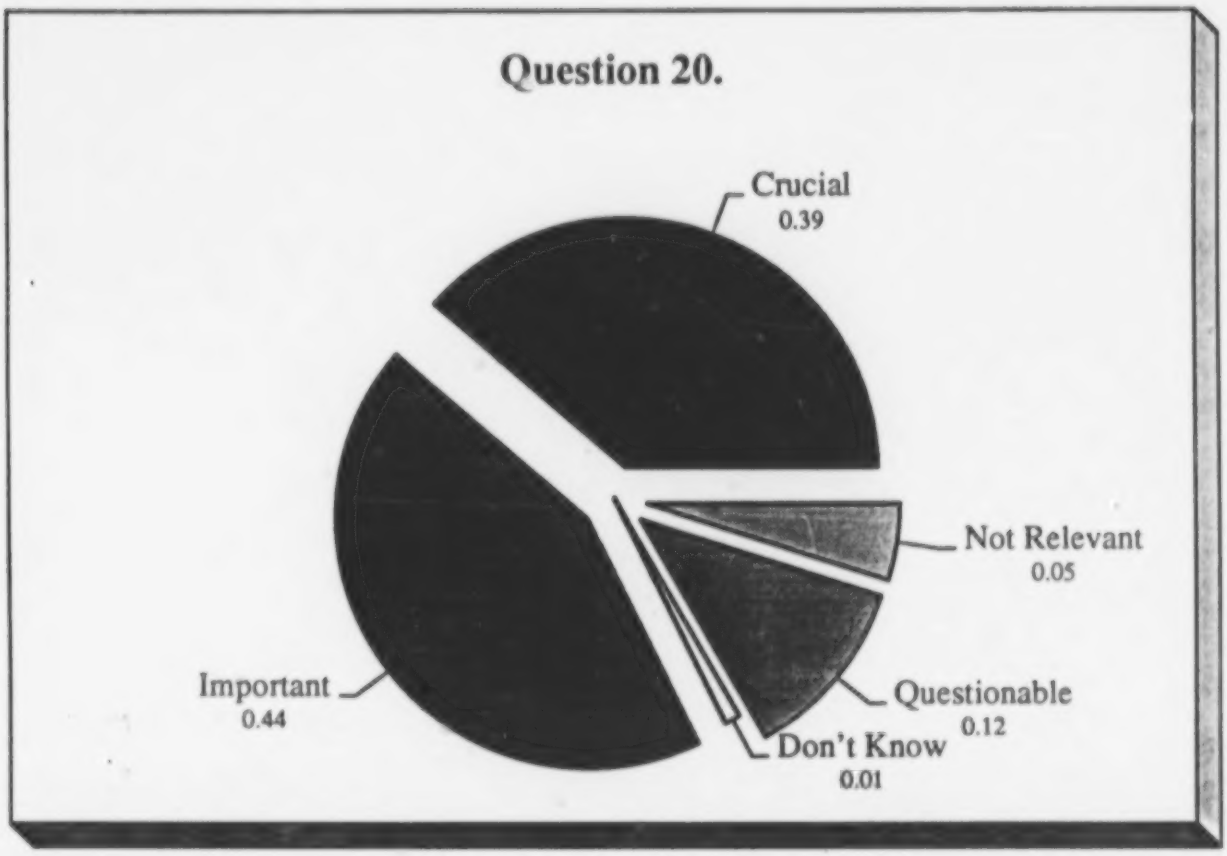
How relevant is knowledge in the area, multicultural trends, including characteristics and concerns of subgroups, subgroup and societal interaction patterns, and methods of conflict resolution, to the work you do as a practicing counselor?

Figure 37.



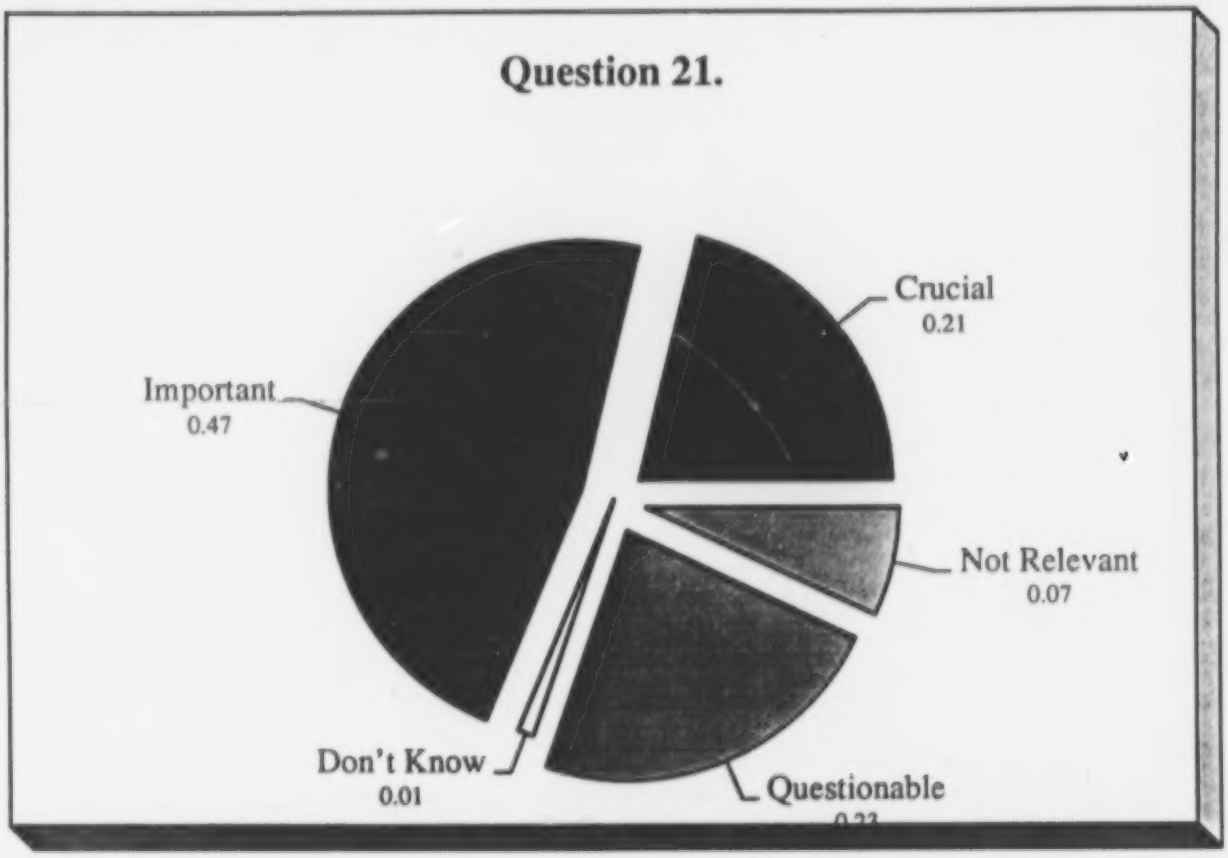
How relevant is knowledge in the area, human sexuality, including social mores and values, differing patterns of sexuality, factors influencing sexual adjustment, and methods of facilitating sexual adjustment to the work you do as a practicing counselor?

Figure 38.



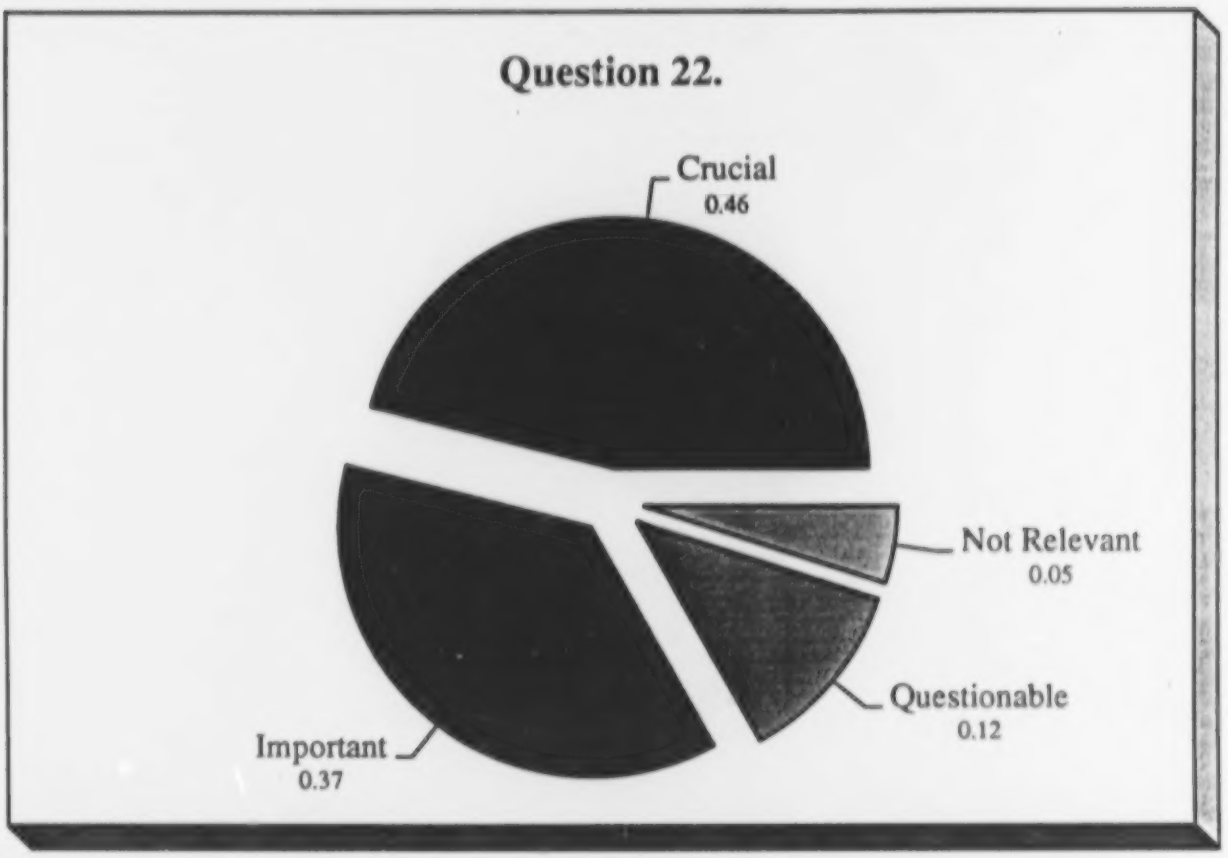
How relevant is knowledge in the area, major societal concerns, including stress, person abuse, substance abuse, discrimination on the basis of human characteristics such as: age, race, religious preference, physical condition, sexual preference, ethnicity, or gender, and methods for alleviating these concerns,to the work you do as a practicing counselor?

Figure 39.



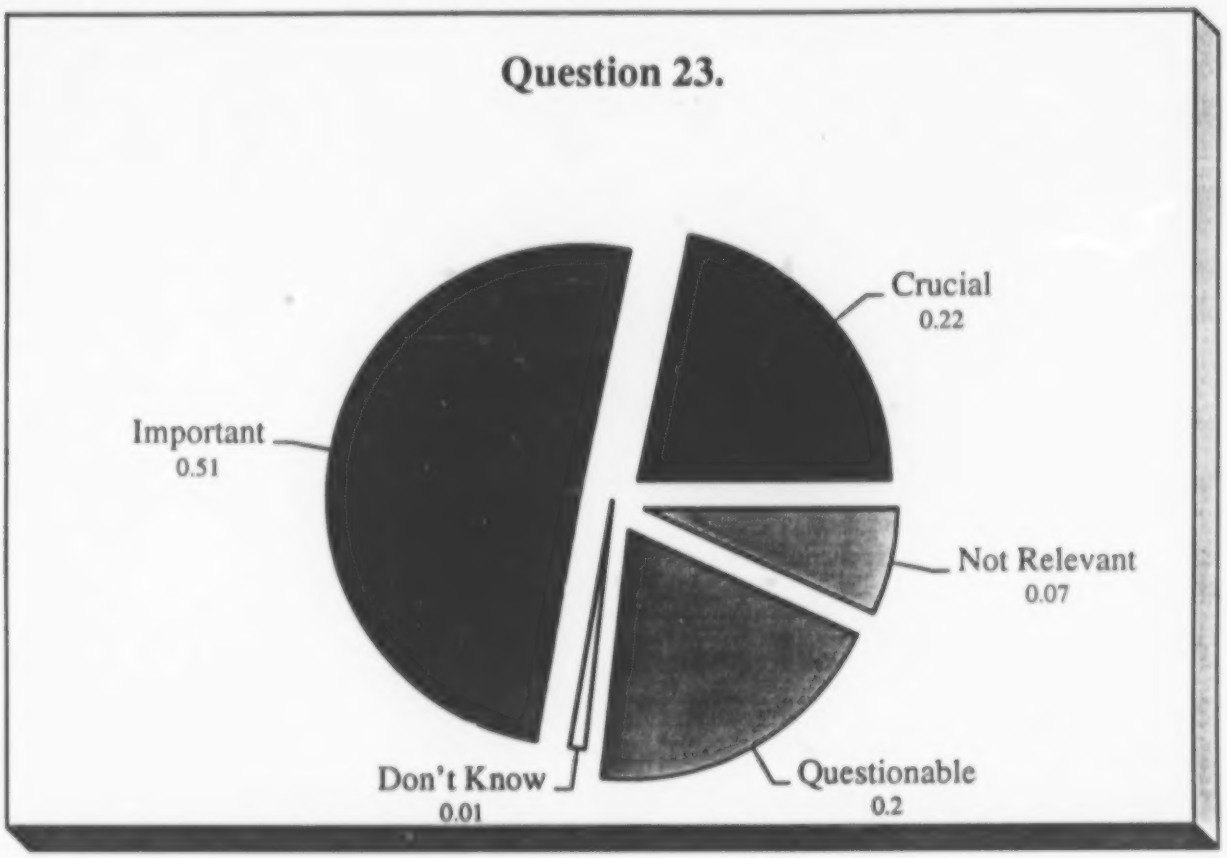
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, the impacts of major societal trends and changes on individuals in society?

Figure 40.



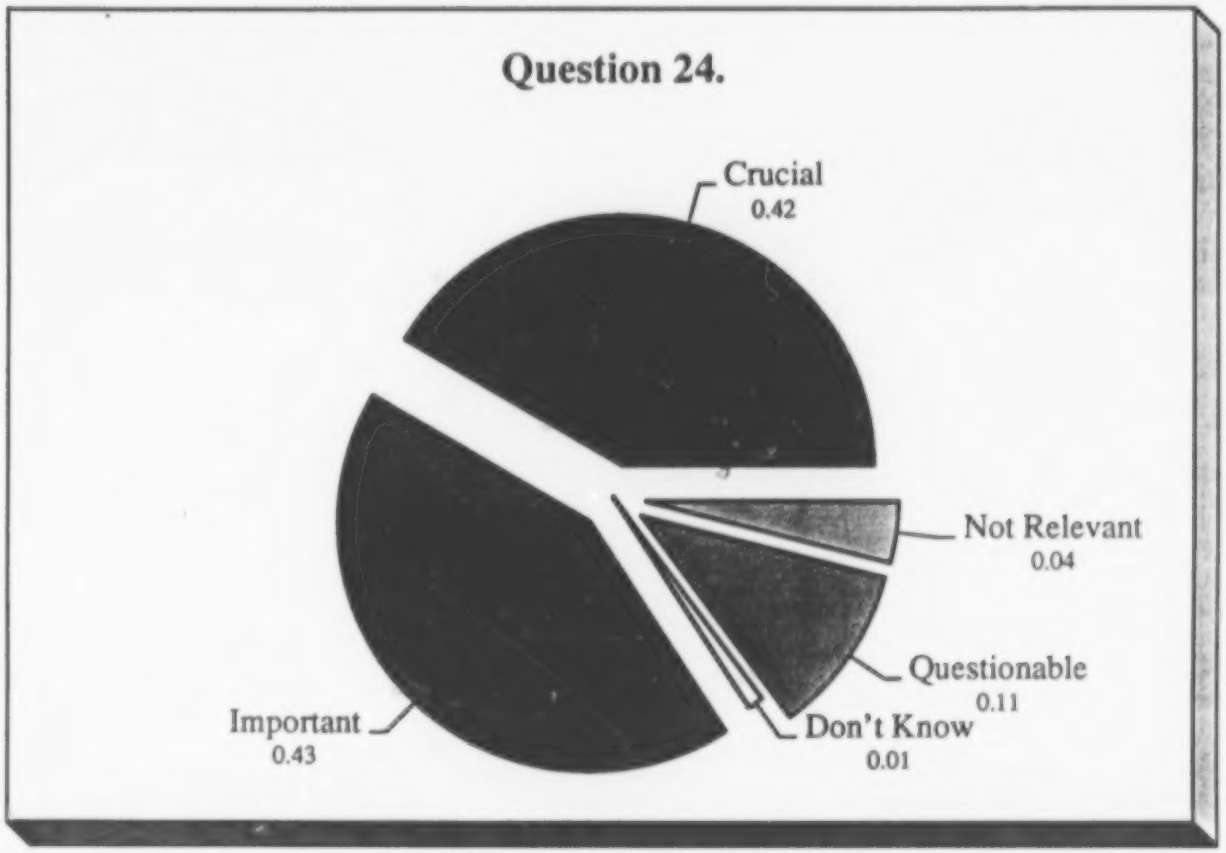
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate coping among individuals confronting societal changes?

Figure 41.



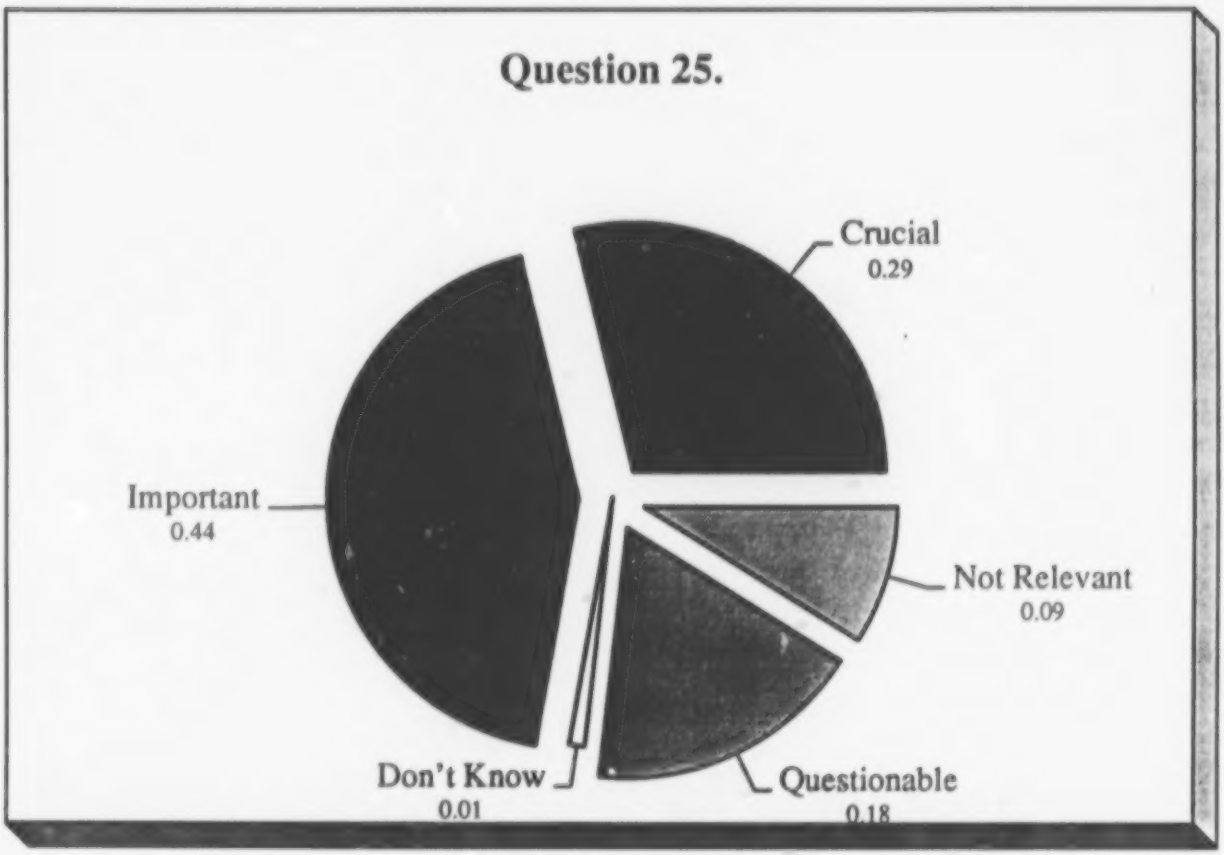
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, the nature of human roles held by an individual?

Figure 42.



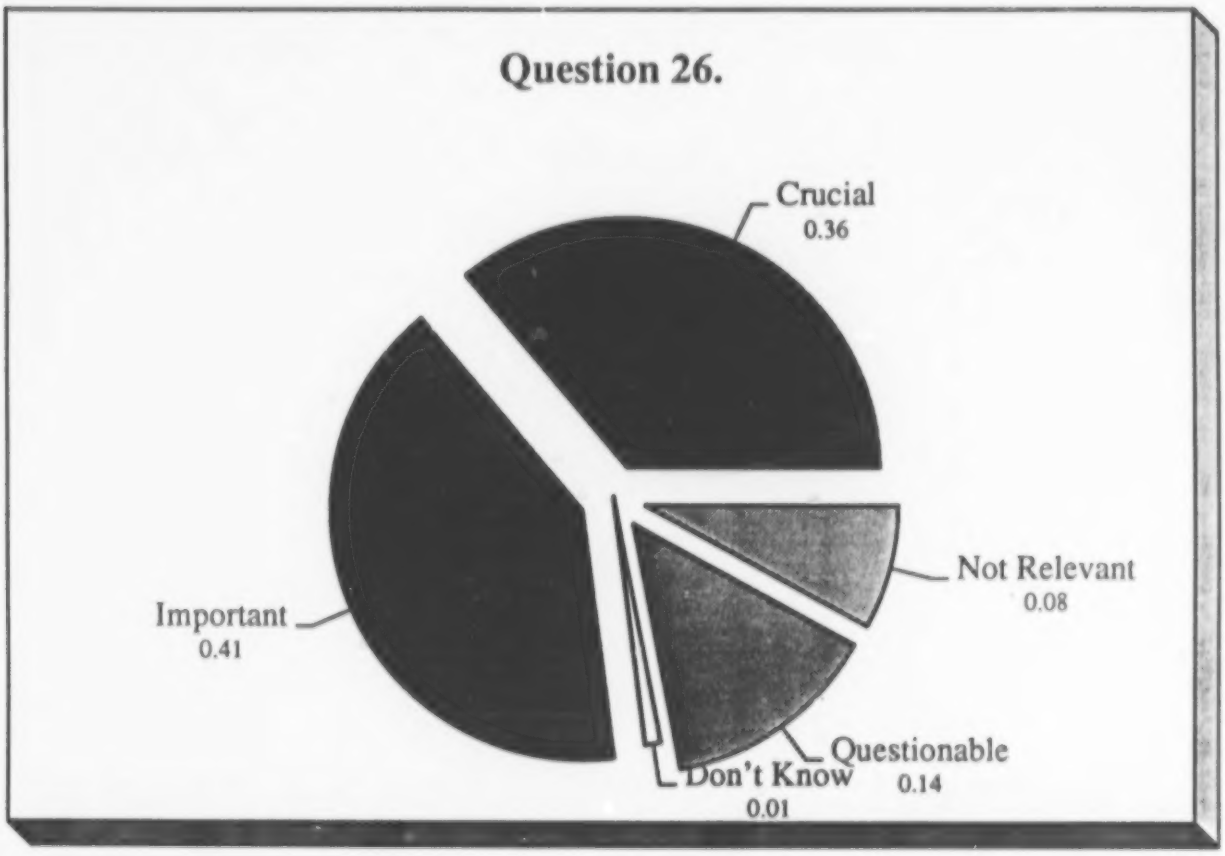
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate effective individual role(s) adjustment(s)?

Figure 43.



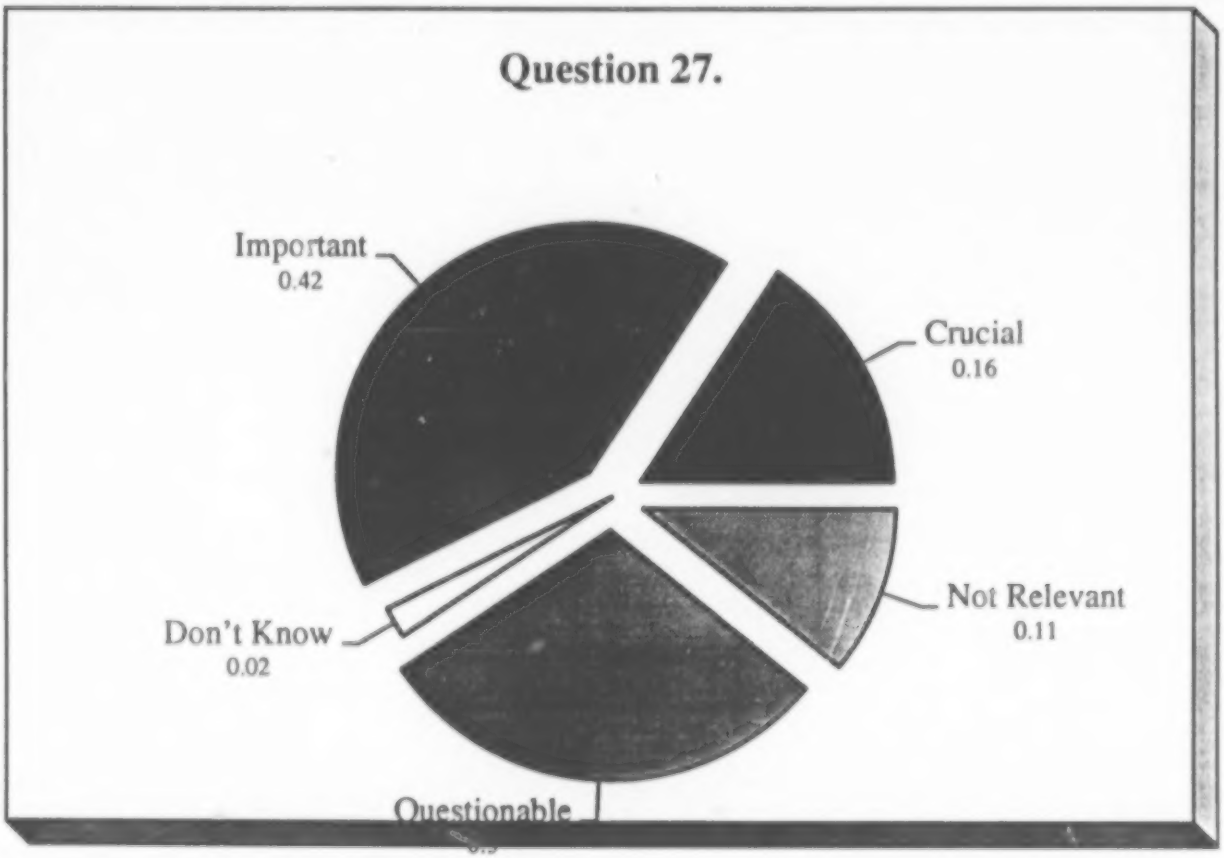
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, marital/familial interaction patterns?

Figure 44.



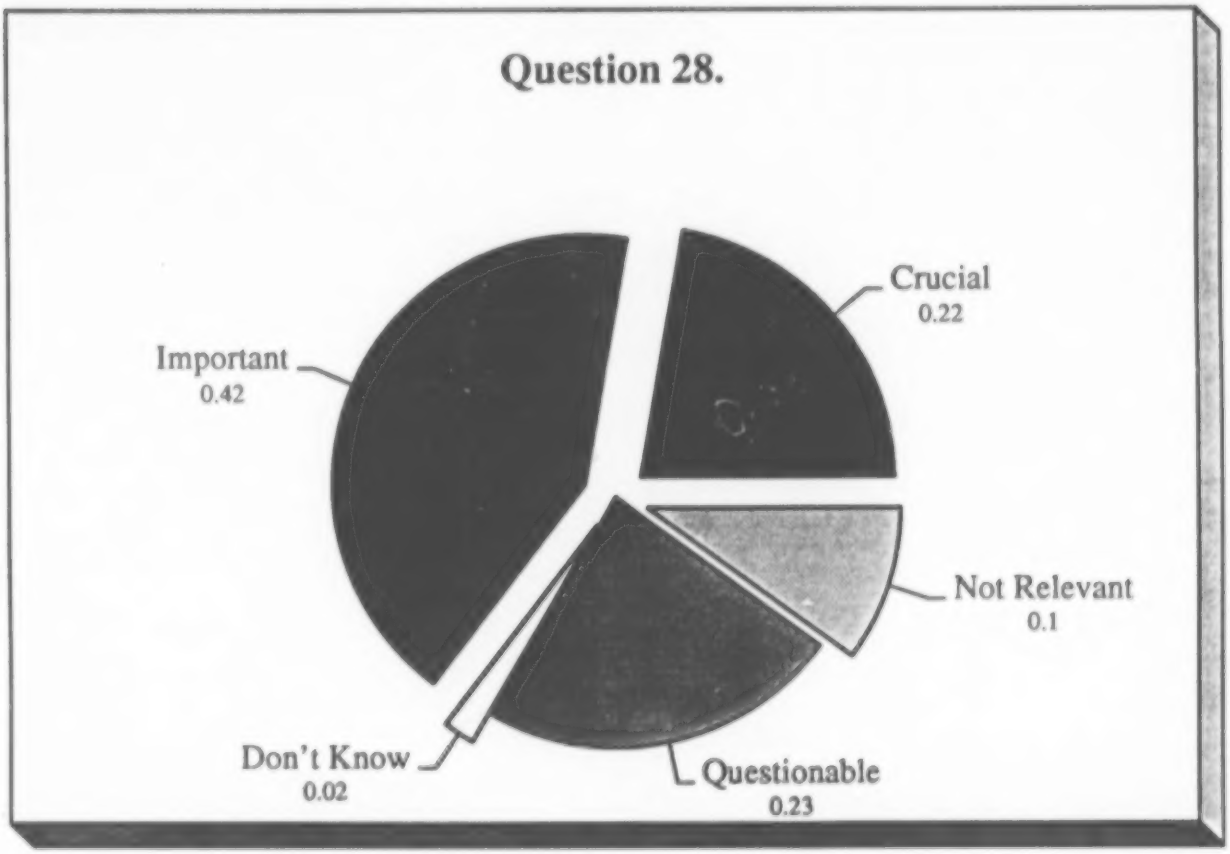
...How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate effective marital/familial interactions and adjustments?

Figure 45.



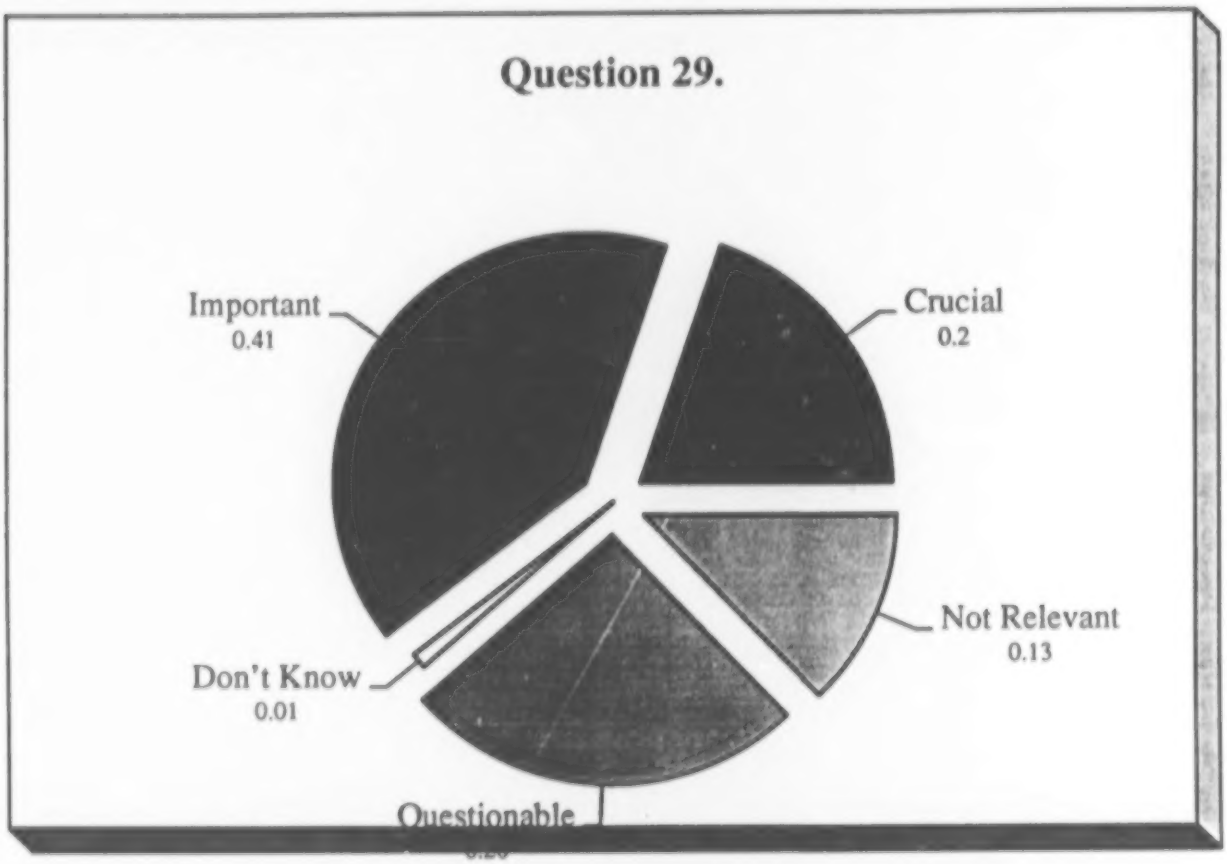
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, effective and ineffective behaviors of subgroups and subgroup members?

Figure 46.



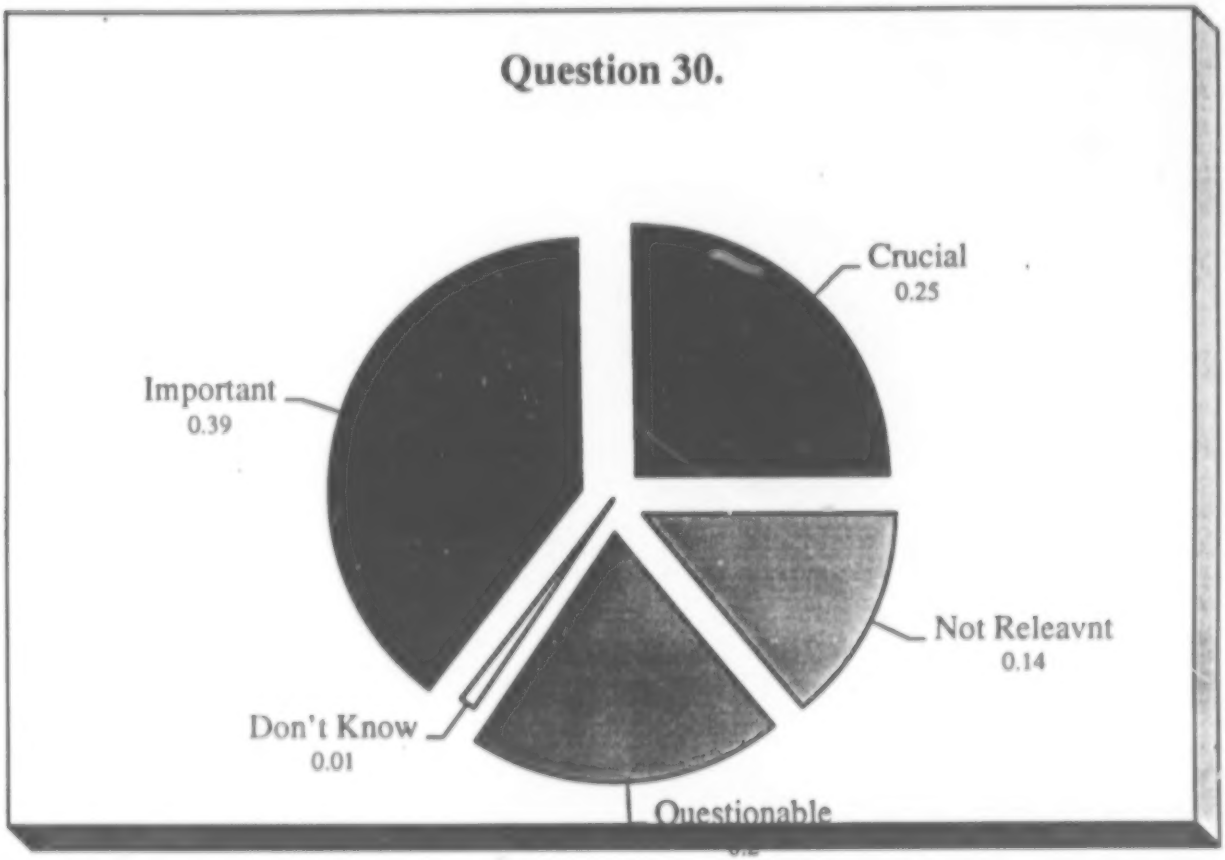
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate effective interactions and adjustments for subgroups, subgroup members, and society?

Figure 47.



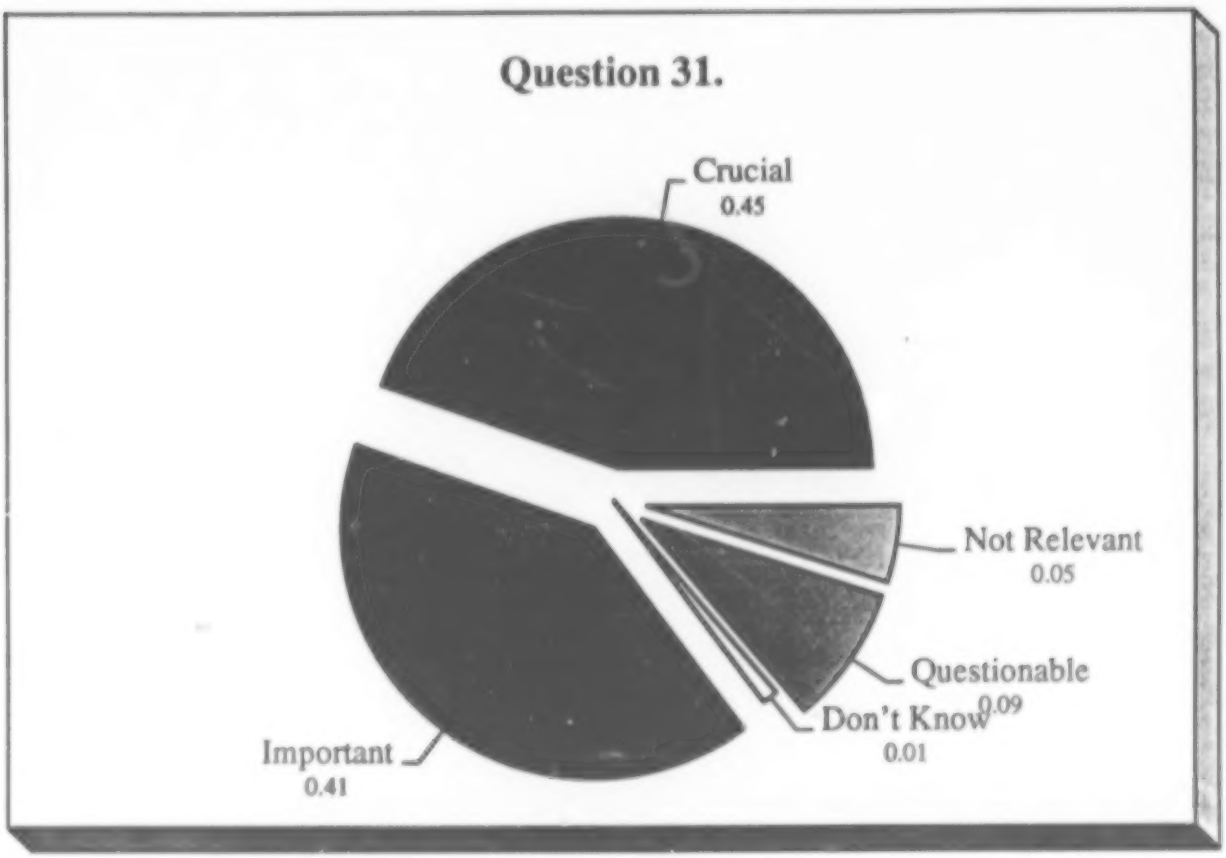
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain in operational terms, factors influencing sexual adjustment ?

Figure 48.



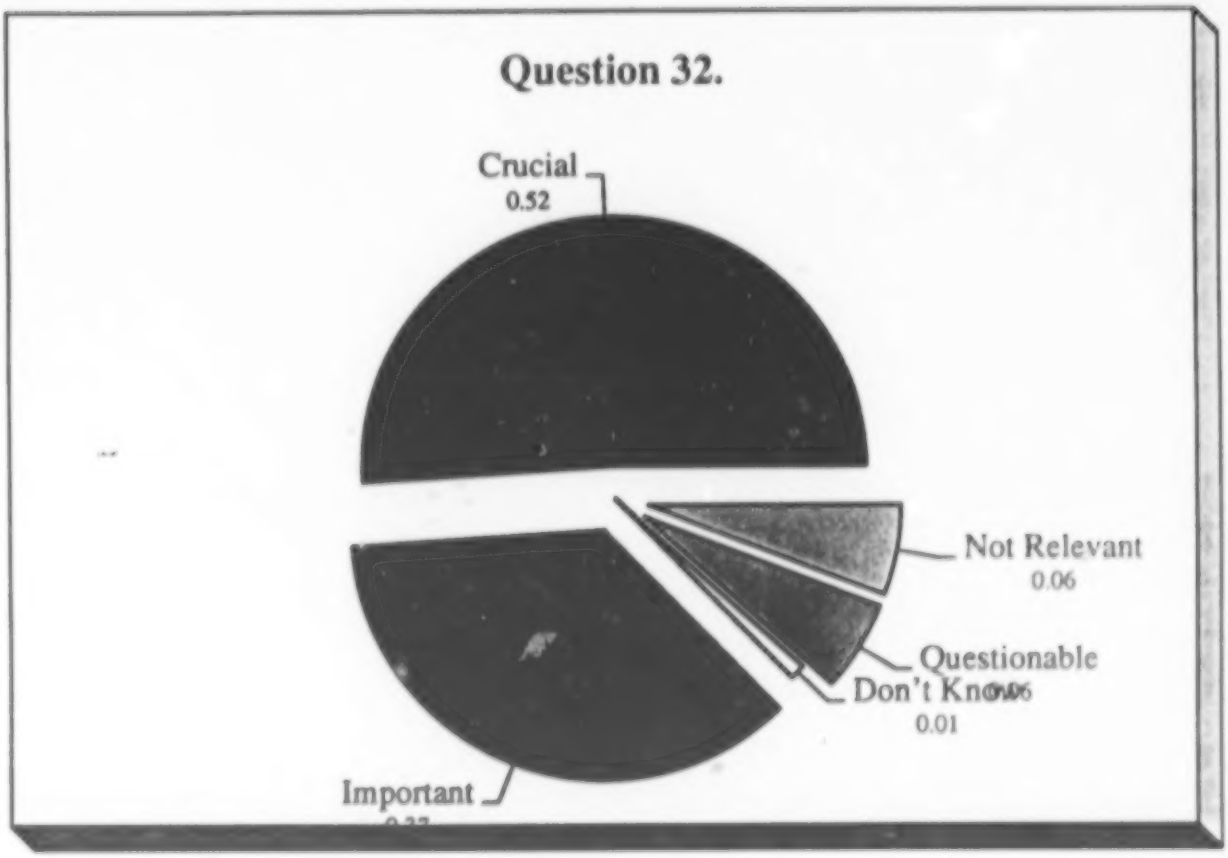
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate effective sexual adjustment ?

Figure 49.



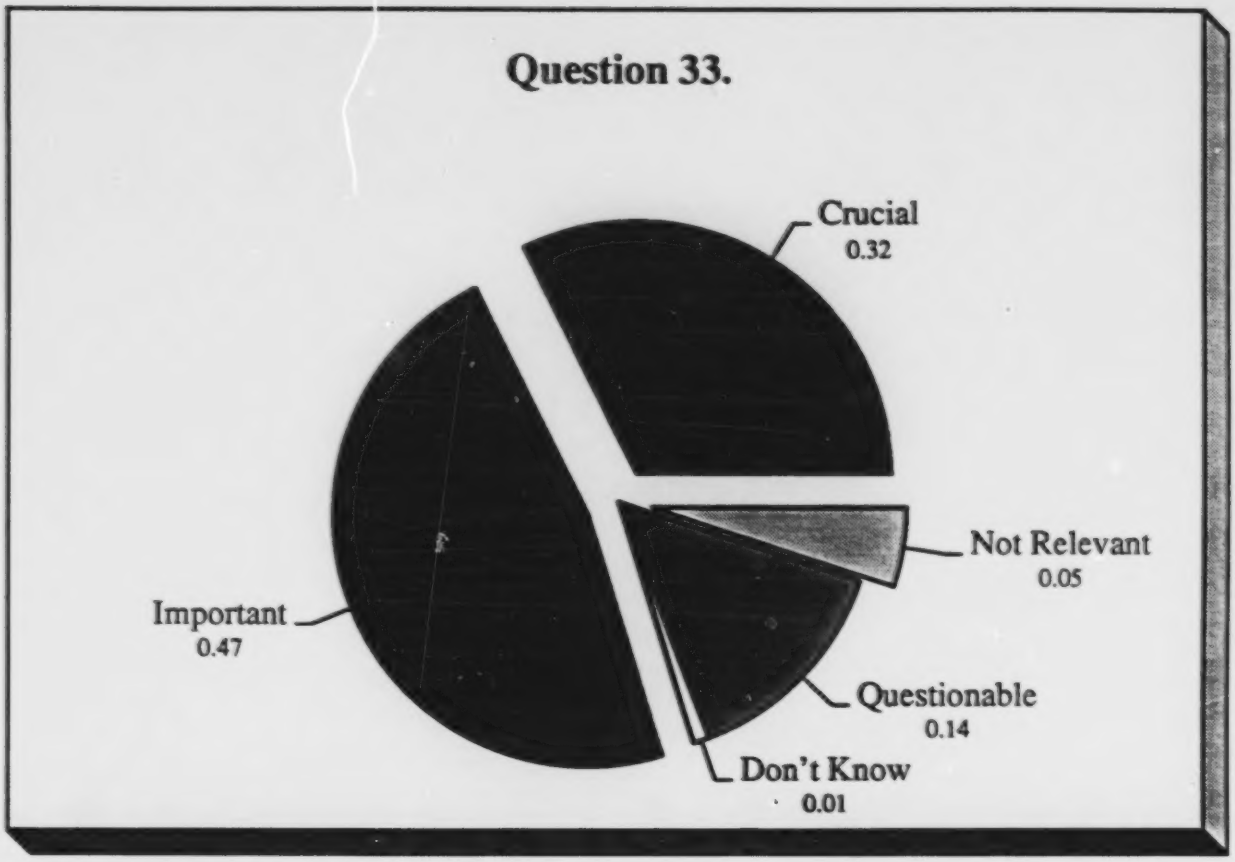
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, major causes and results of excessive stress?

Figure 50.



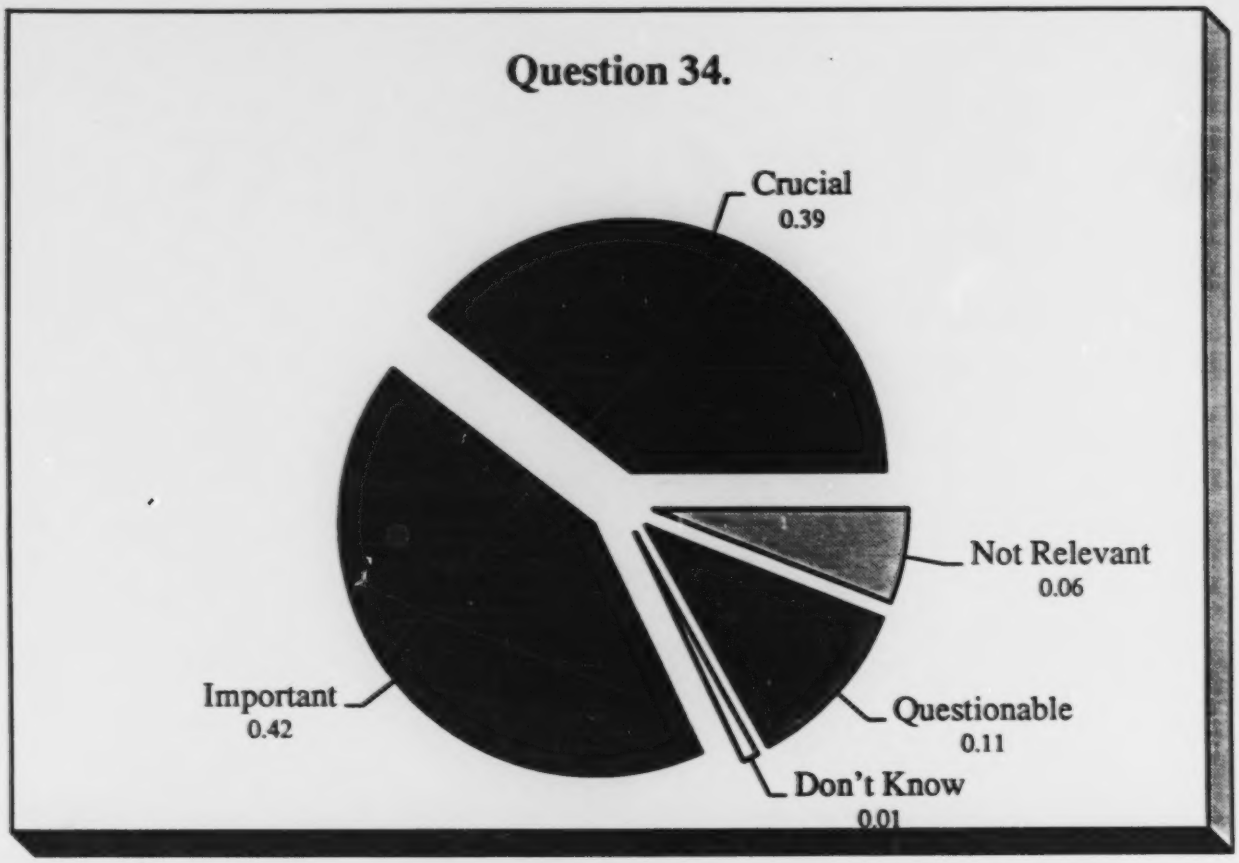
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate stress reduction?

Figure 51.



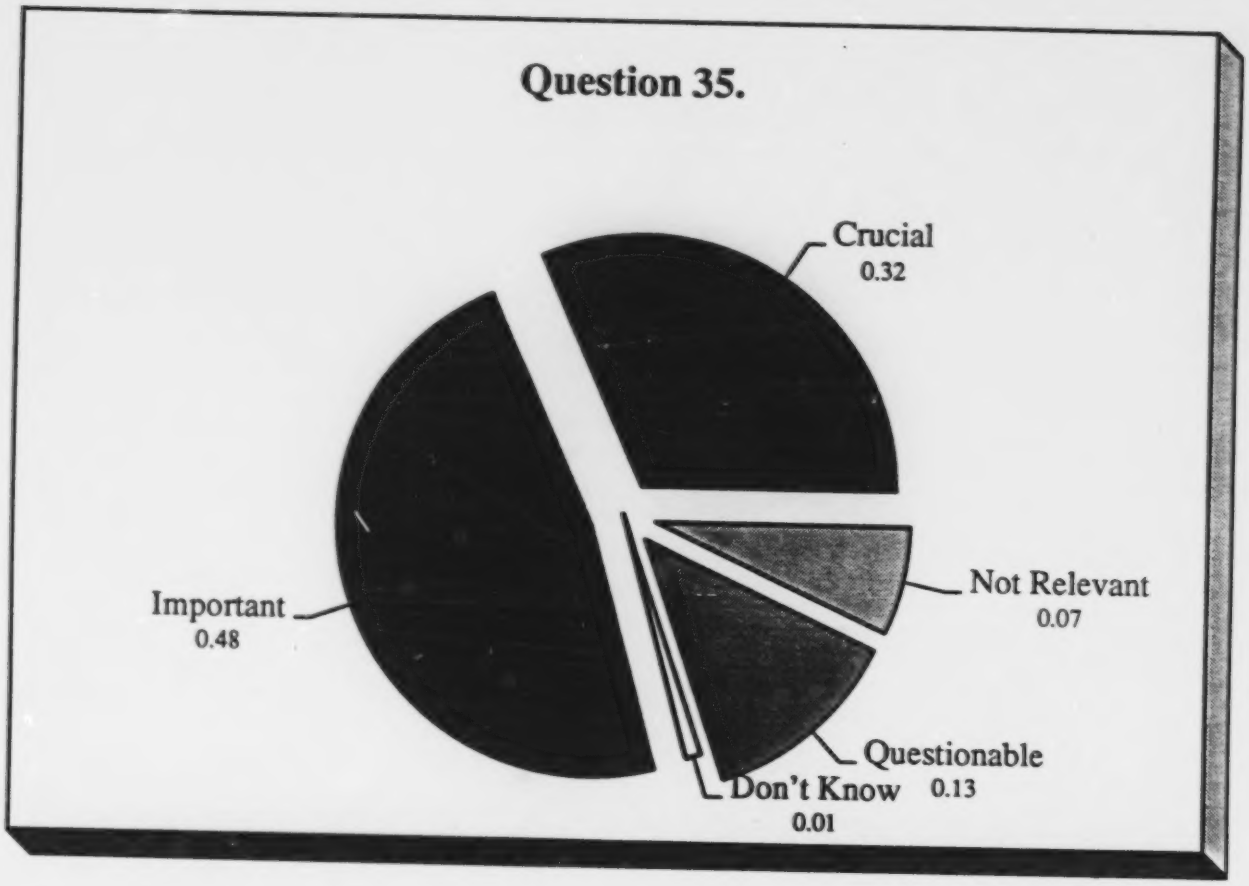
How relevant to the work you do as a practicing counselor is knowledge of the skill:explain, in operational terms, factors influencing and/or causing person abuse?

Figure 52.



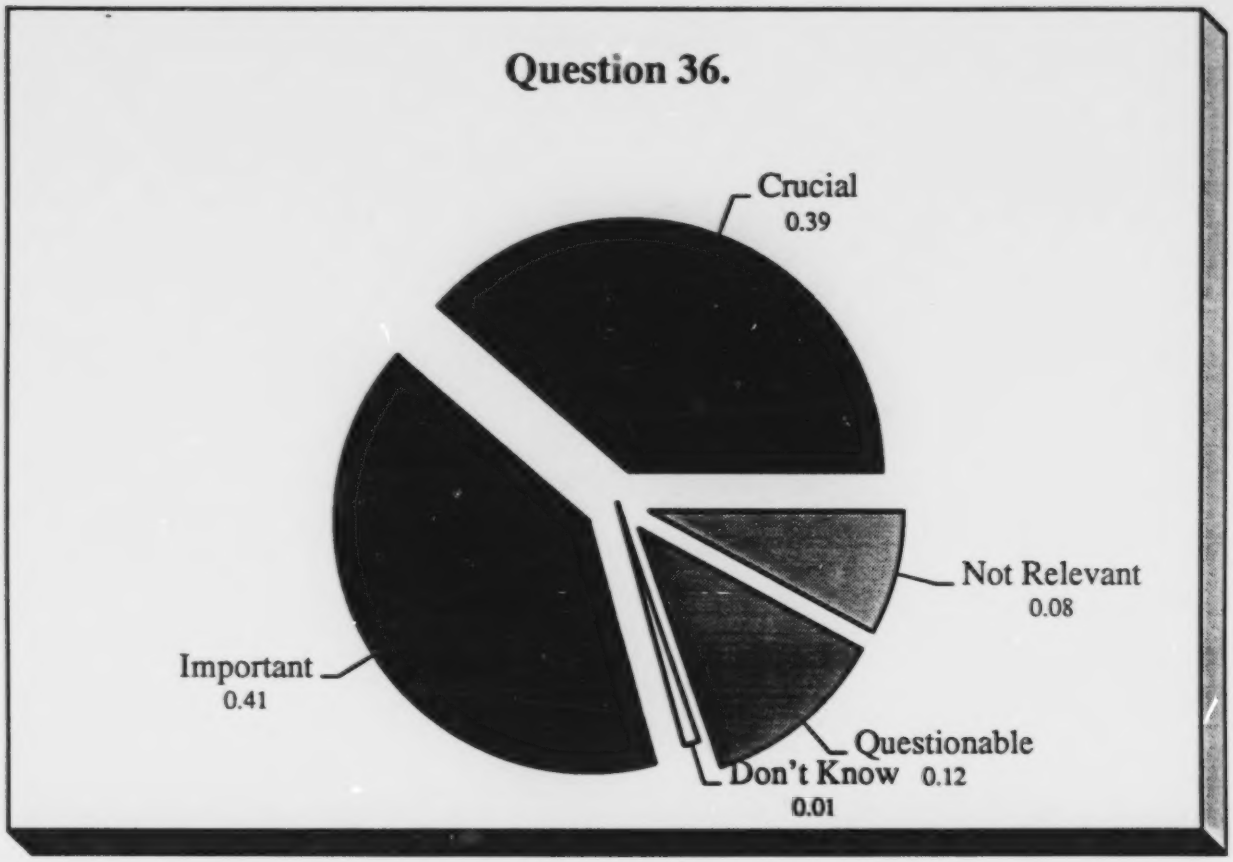
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate elimination of person abuse?

Figure 53.



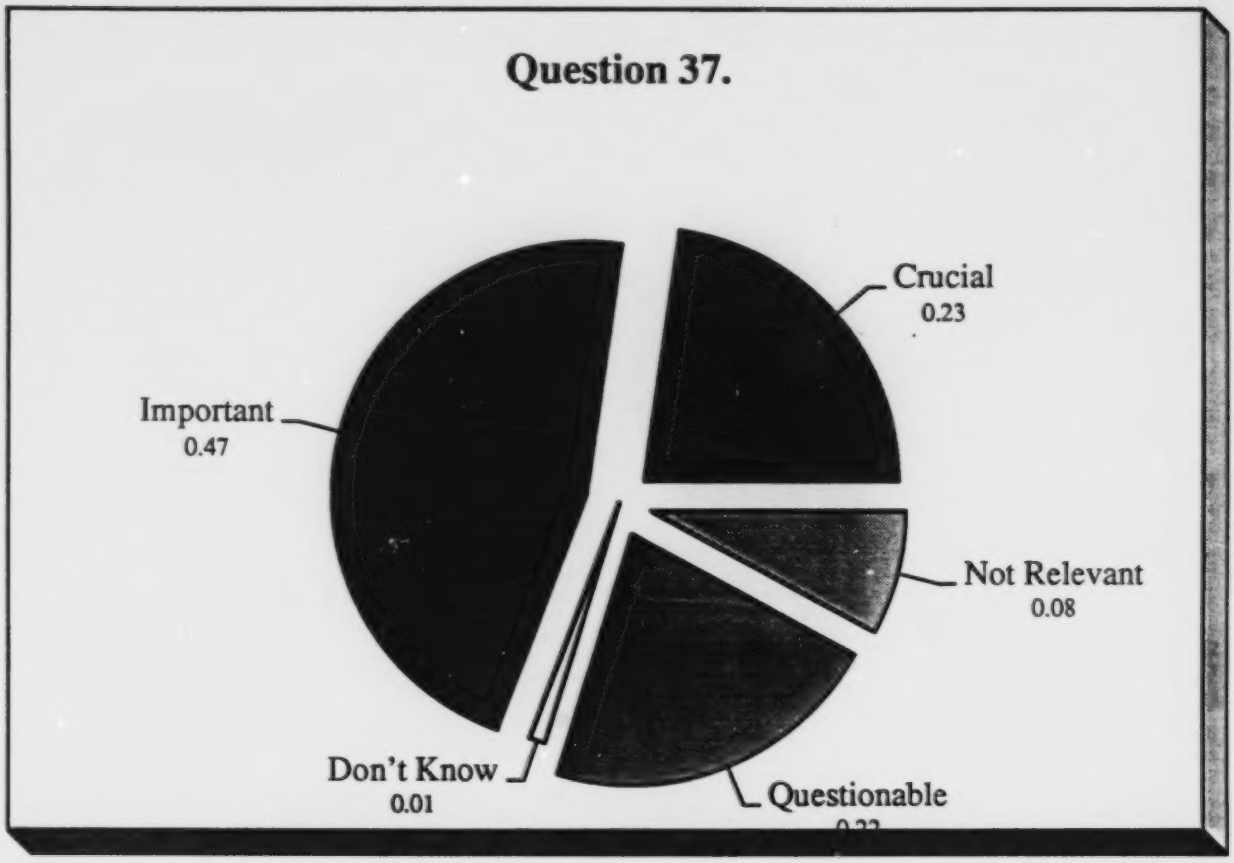
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, factors influencing and/or causing substance abuse?

Figure 54.



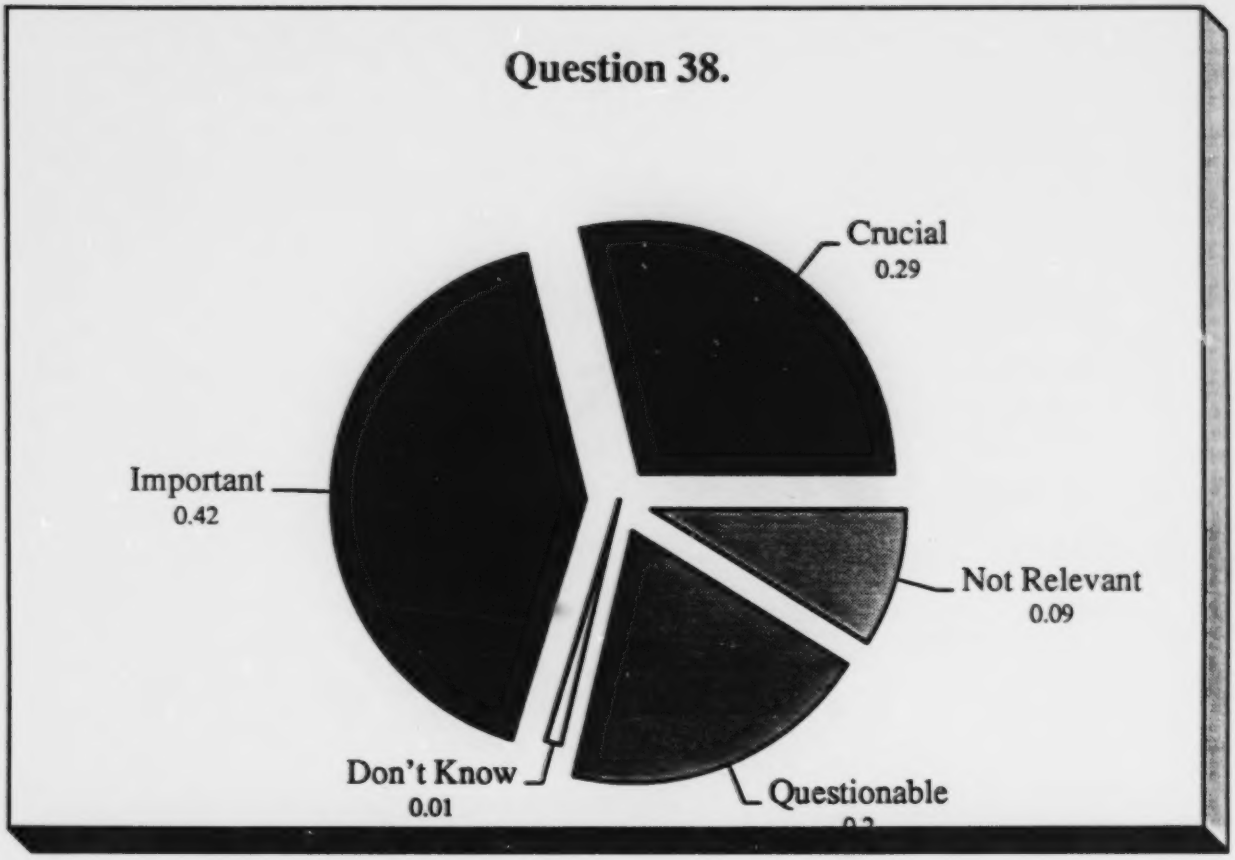
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate elimination of substance abuse?

Figure 55.



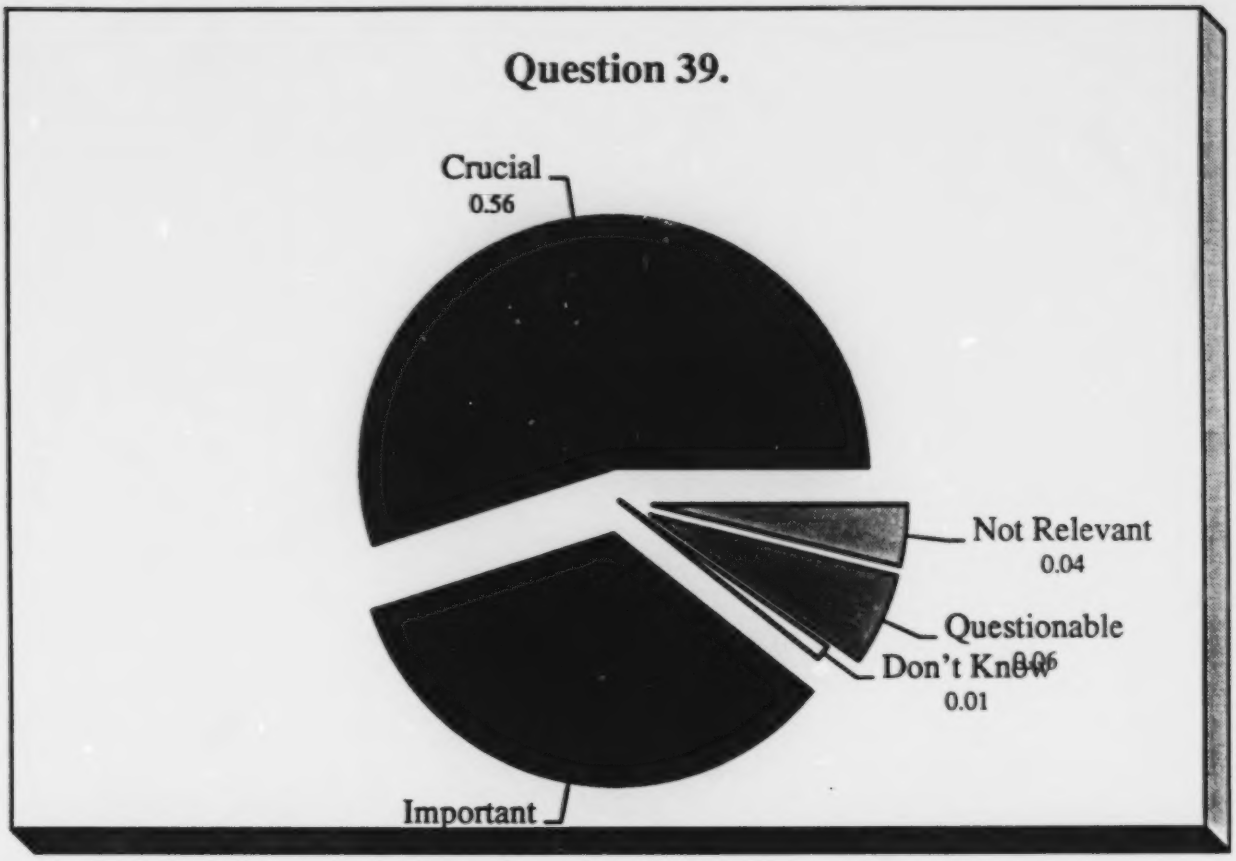
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, the nature of and factors influencing discrimination against persons on the bases of human characteristics?

Figure 56.



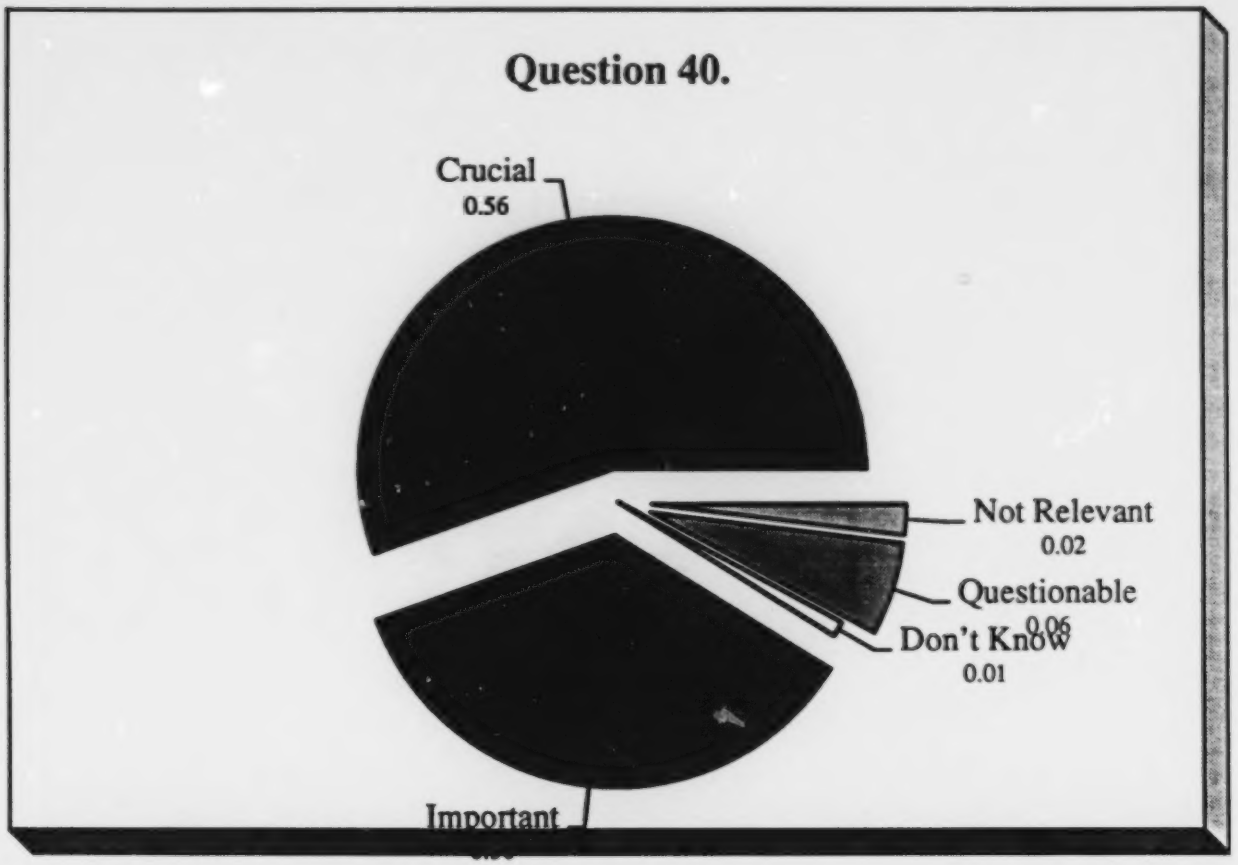
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply principles of helping relationships to facilitate elimination of discrimination against persons on the bases of human characteristics?

Figure 57.



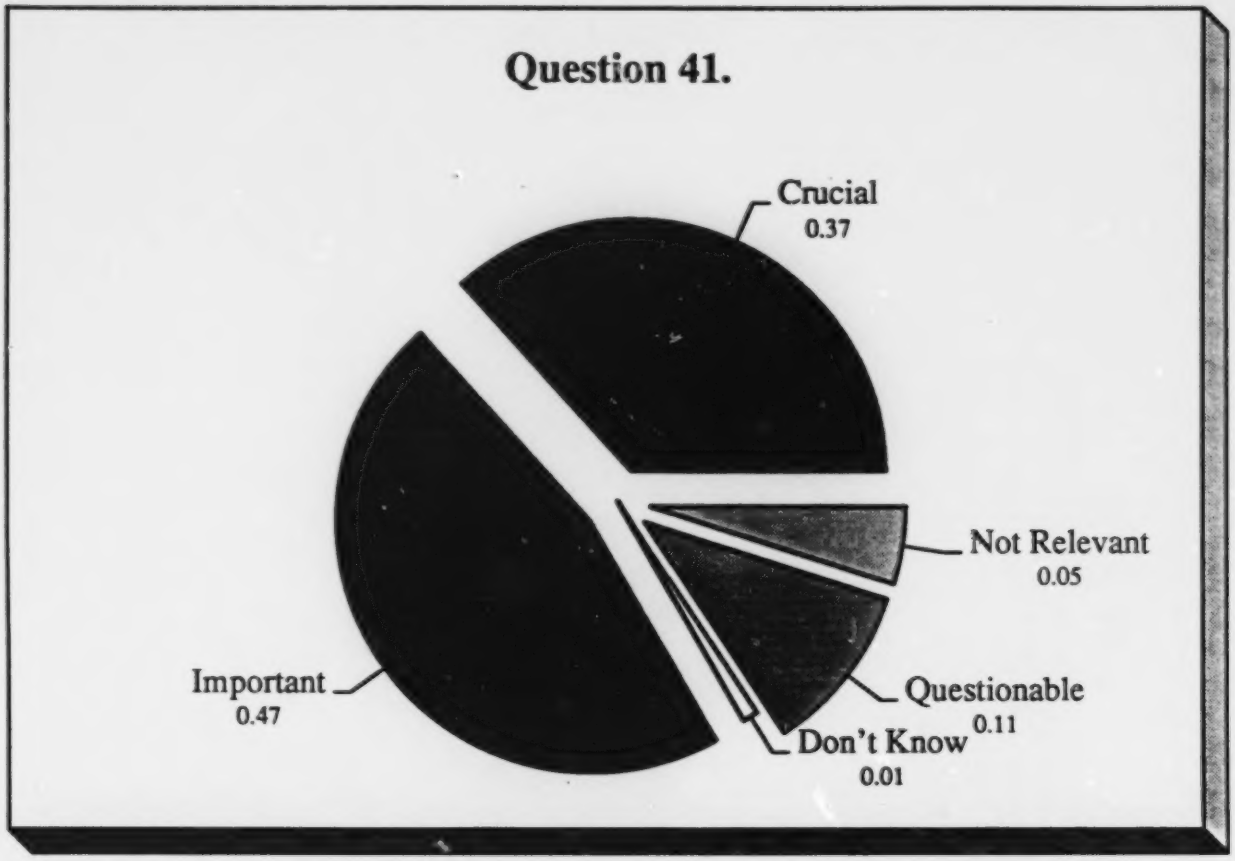
How relevant is knowledge in the area, counselor or consultant characteristics and behaviors that influence helping processes, including verbal and nonverbal behaviors and personal characteristics, orientations, and skills, to the work you do as a practicing counselor?

Figure 58.



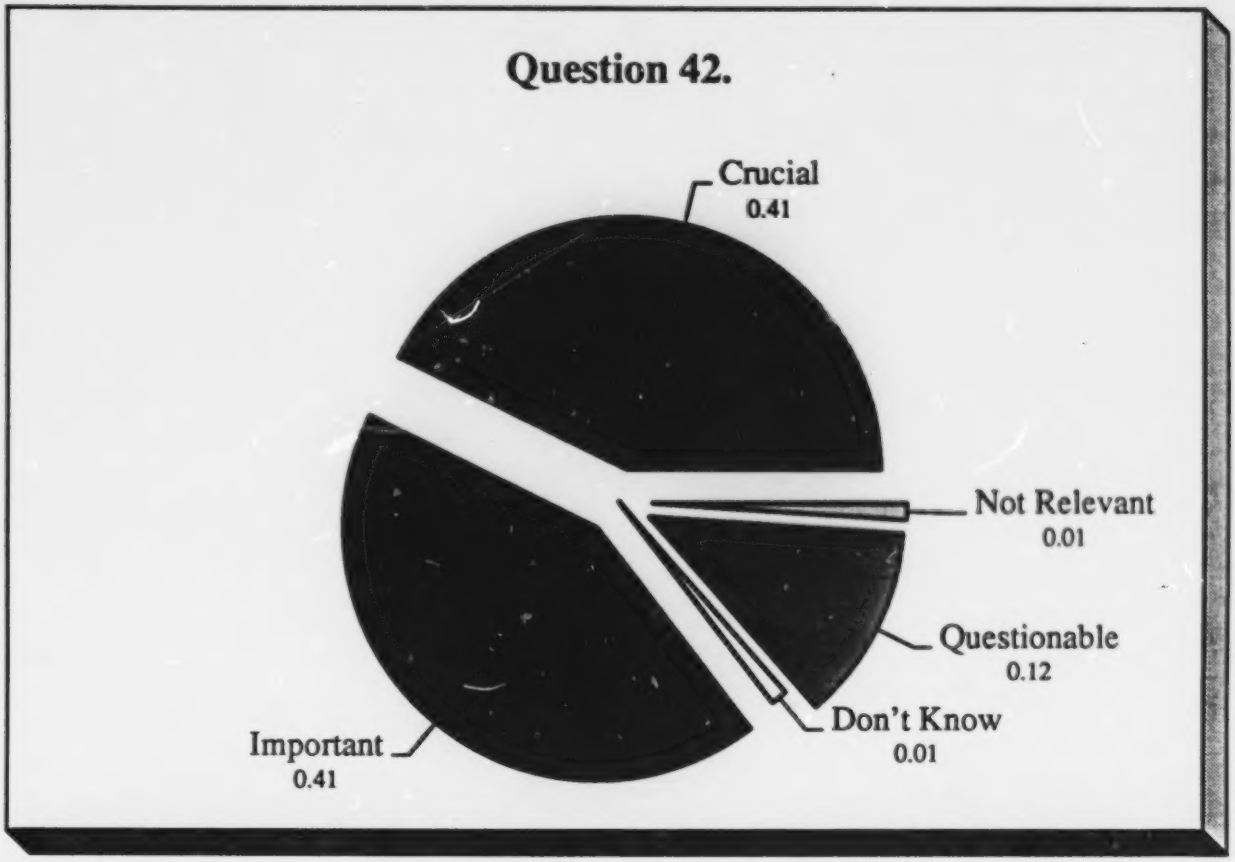
How relevant is knowledge in the area, client or consultee characteristics and behaviors that influence helping processes, including verbal and nonverbal behaviors and personal traits, characteristics, capabilities, and life circumstances to the work you do as a practicing counselor?

Figure 59.



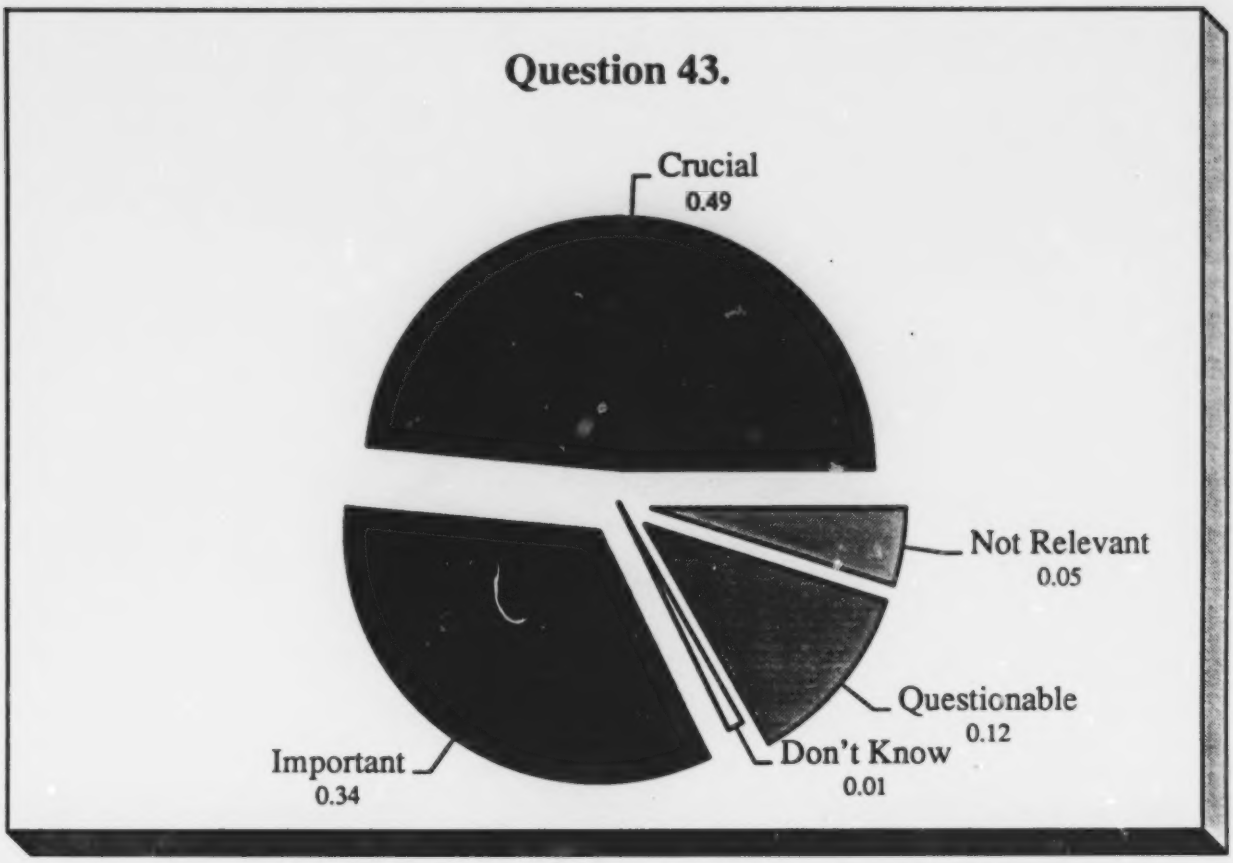
How relevant is knowledge in the area, factors (other than participants) that influence helping processes: environmental and social factors, relationships external to the helping process, and commitment to change to the work you do as a practicing counselor?

Figure 60.



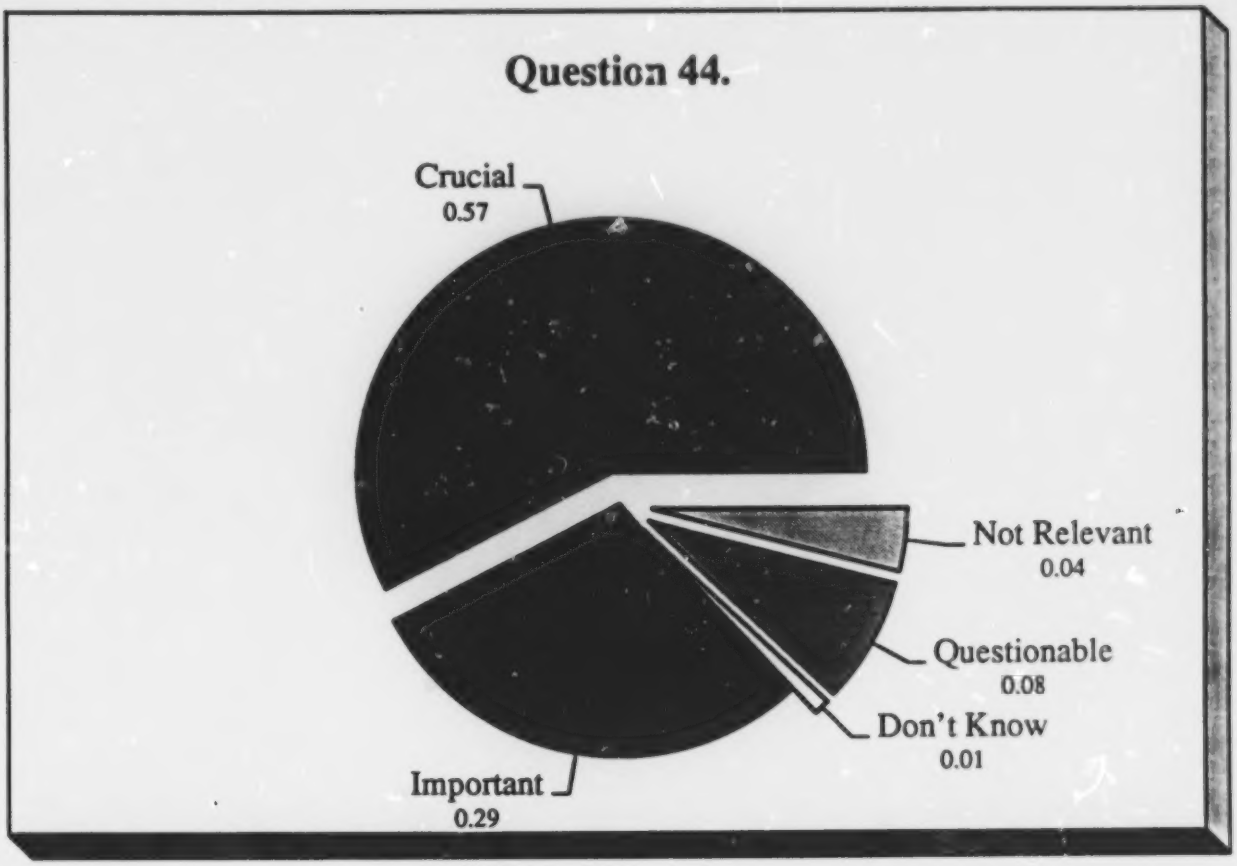
How relevant is knowledge in the area, counseling and consultation theories, including major theories, proponents, advantages and limitations, factors considered in application, and behavioral manifestations, to the work you do as a practicing counselor?

Figure 61.



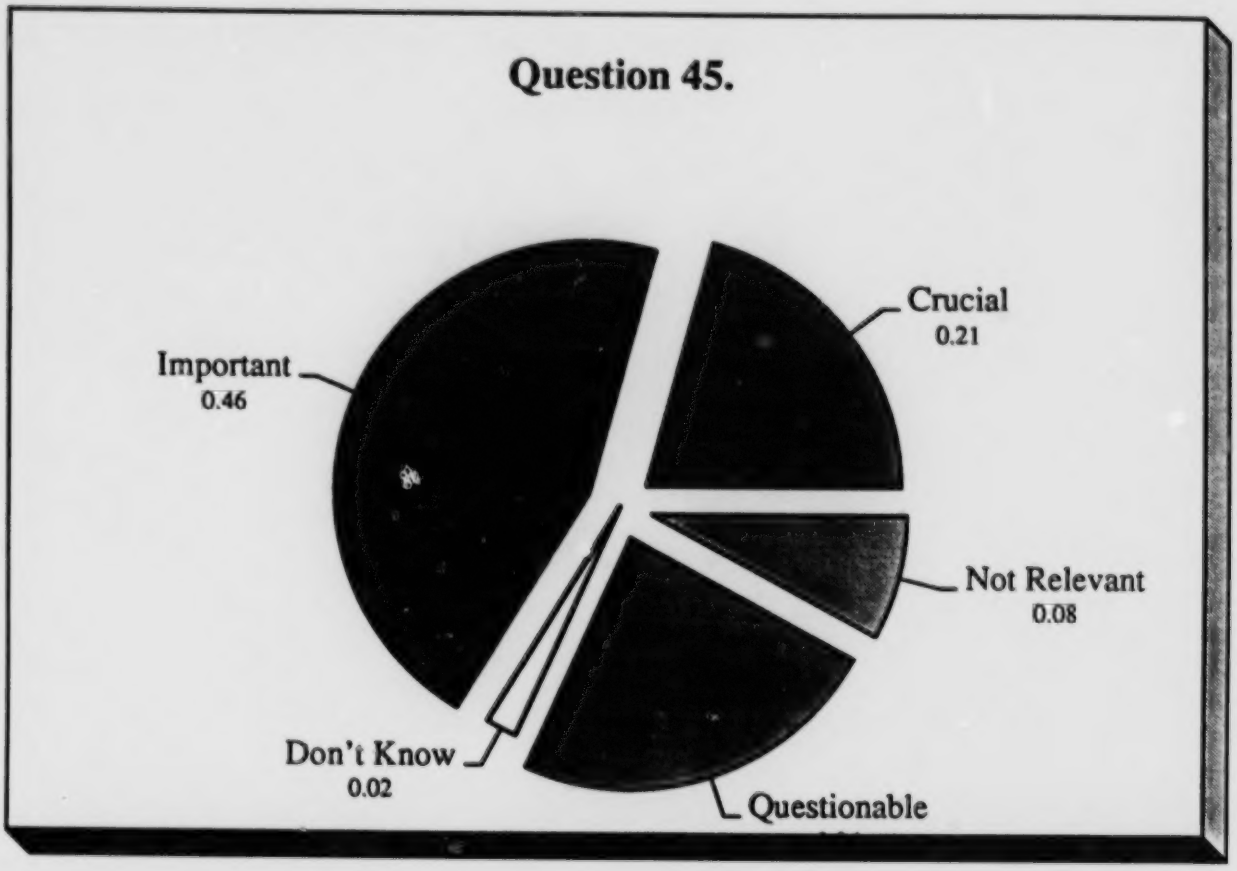
How relevant is knowledge in the area, basic and advanced helping skills, including philosophic and theoretical bases, proponents, advantages and limitations, factors considered in applications, and behavioral manifestations, to the work you do as a practicing counselor?

Figure 62.



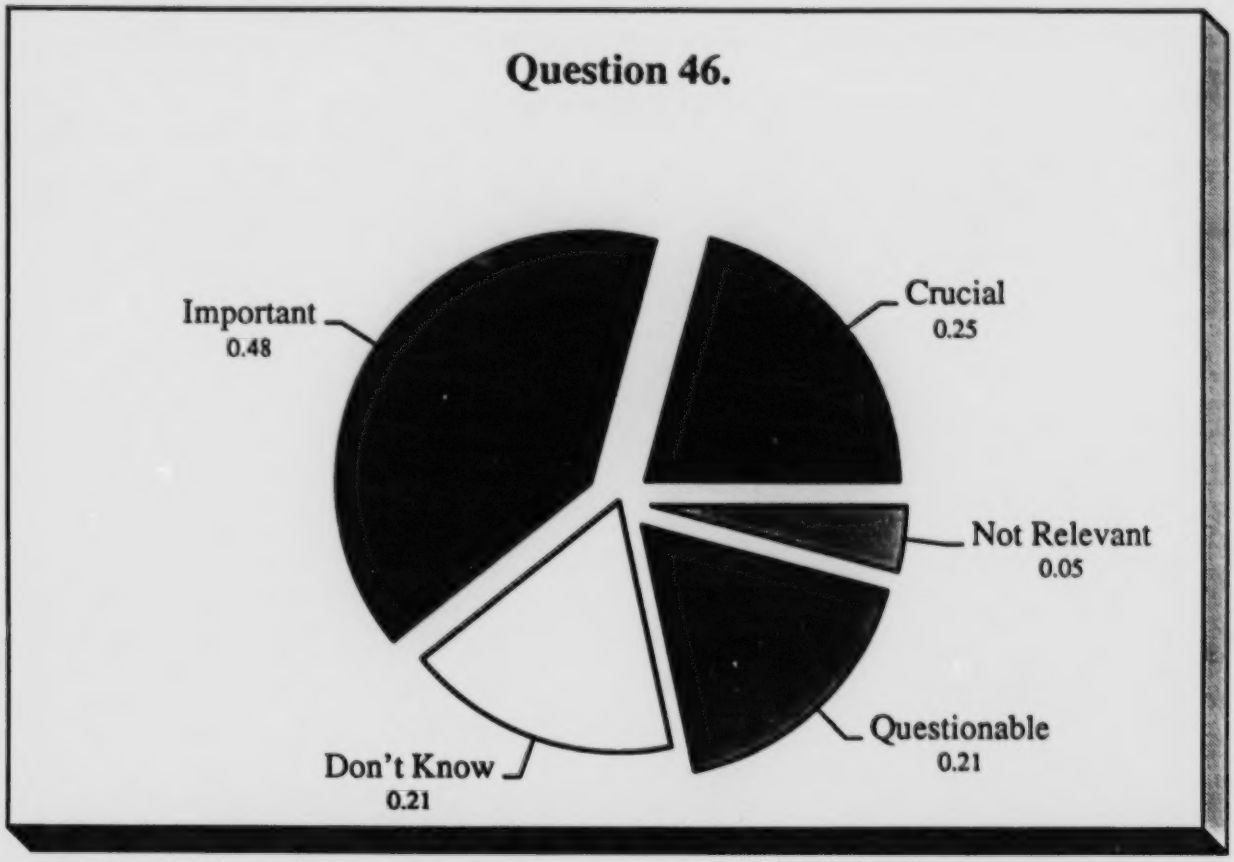
How relevant is knowledge in the area, implementation of helping processes, including goal setting, process control behaviors, determination of process parameters, responsibilities, and appropriate behaviors, and methods for evaluating effectiveness, to the work you do as a practicing counselor?

Figure 63.



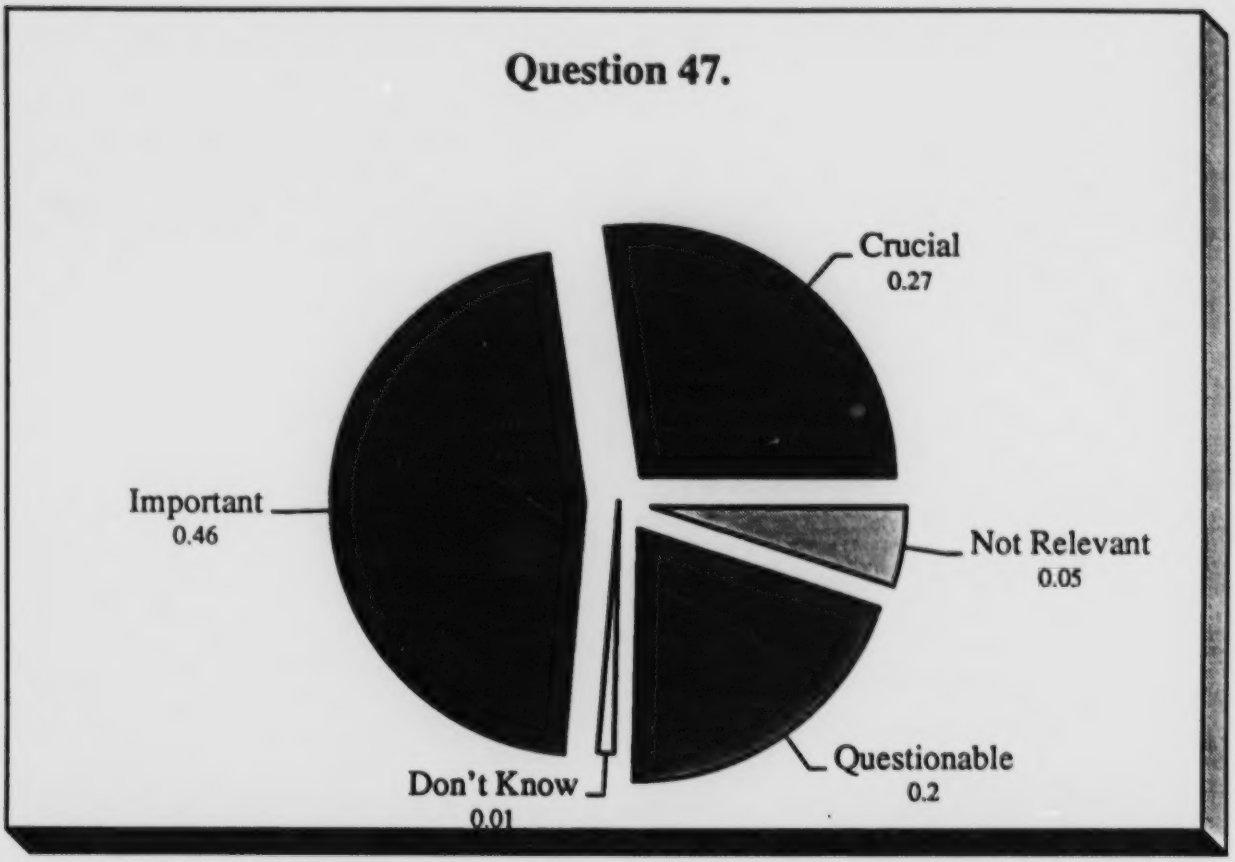
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, counselor or consultant orientations to helping processes?

Figure 64.



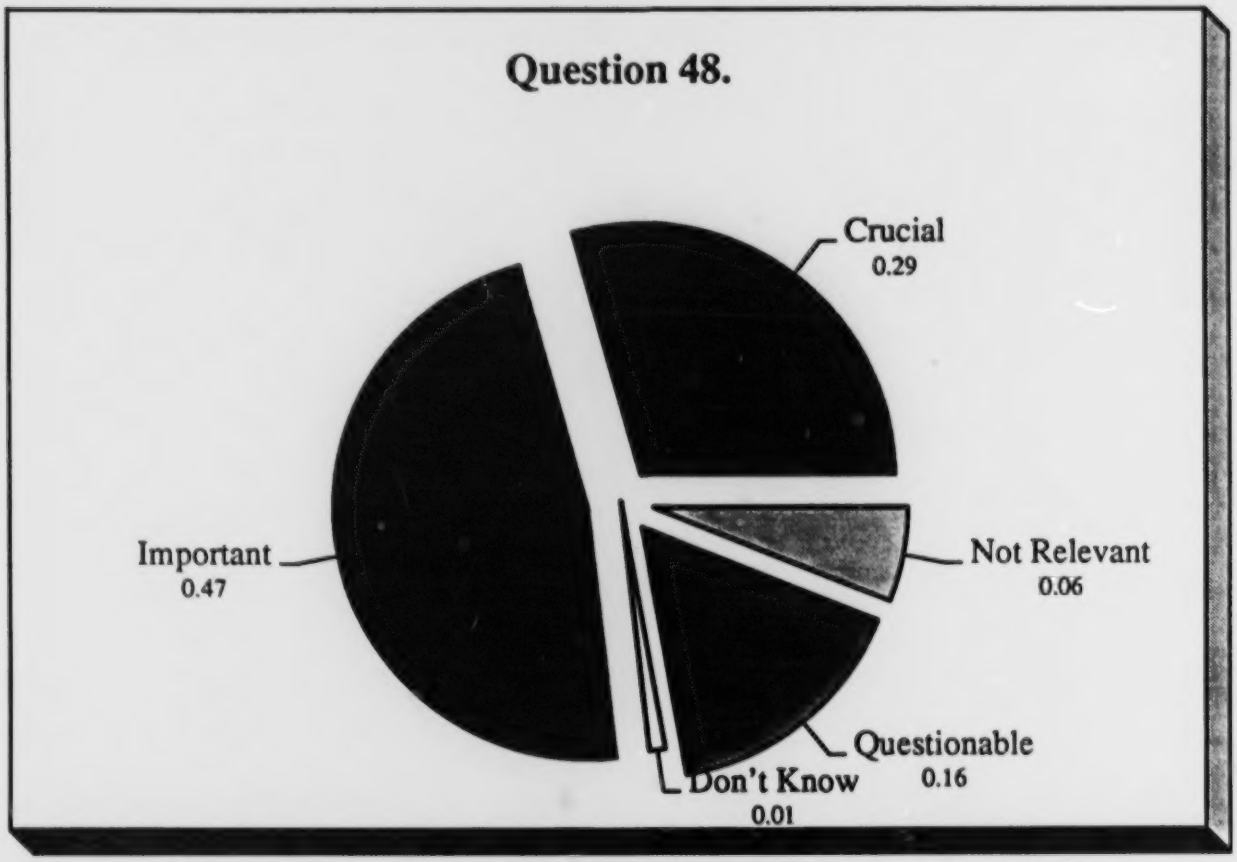
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, counselor or consultant verbal and nonverbal behaviors in helping processes?

Figure 65.



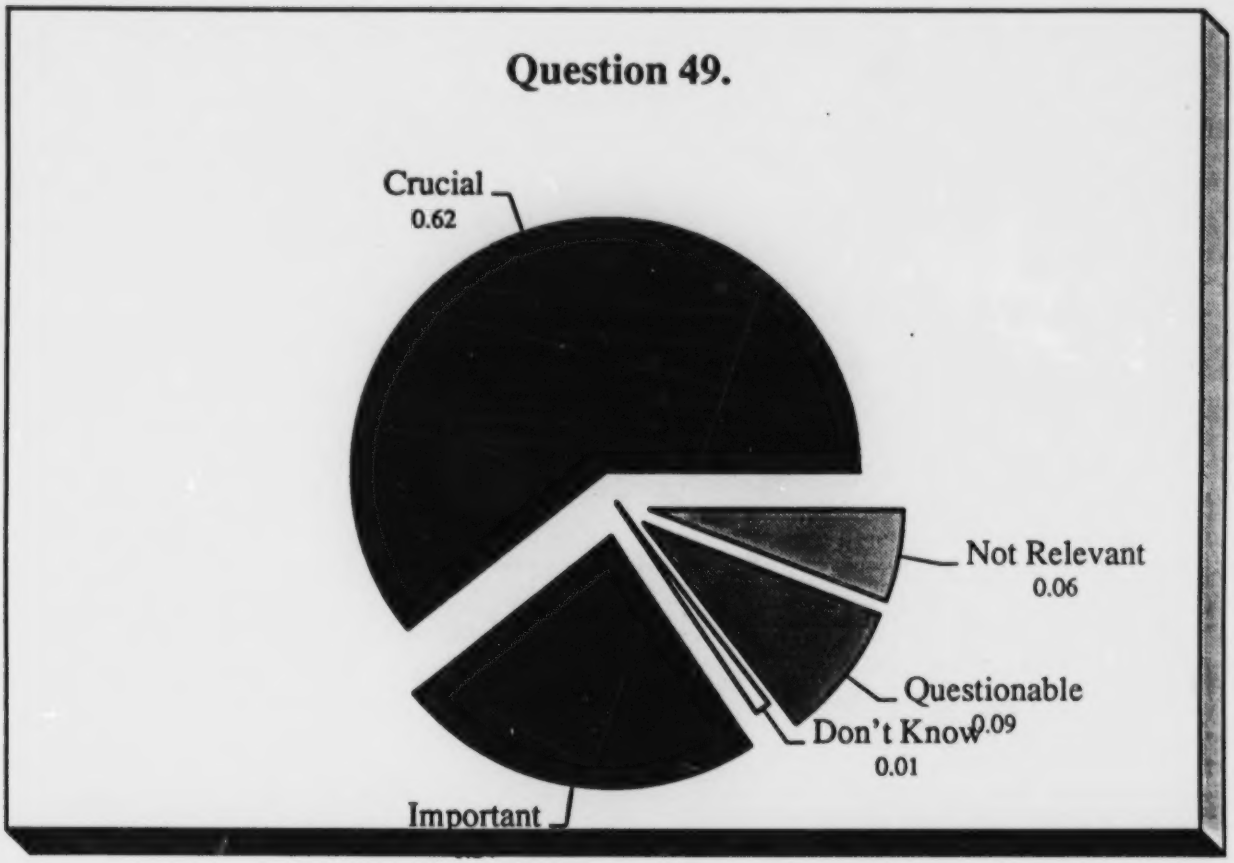
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain and self-evaluate levels of helping skills?

Figure 66.



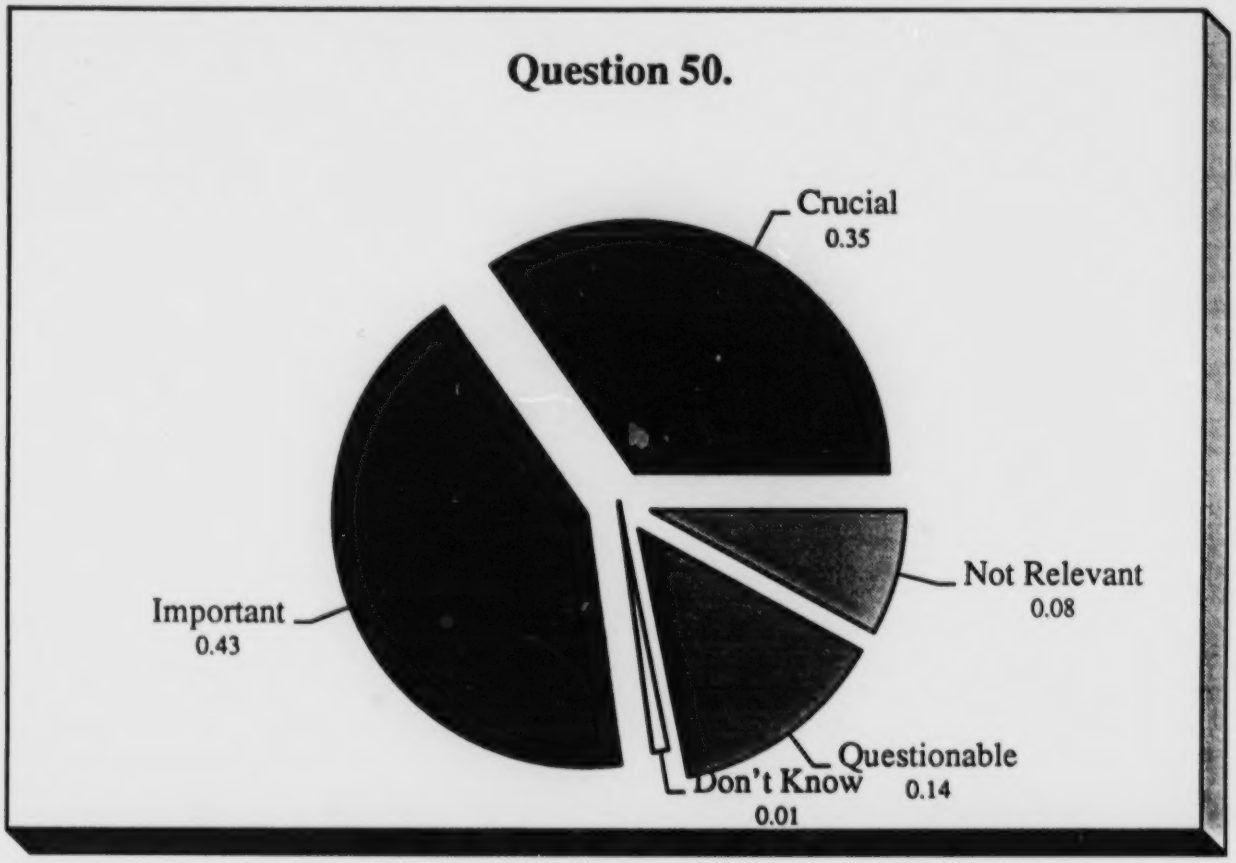
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, internal and external factors affecting helping relationships?

Figure 67.



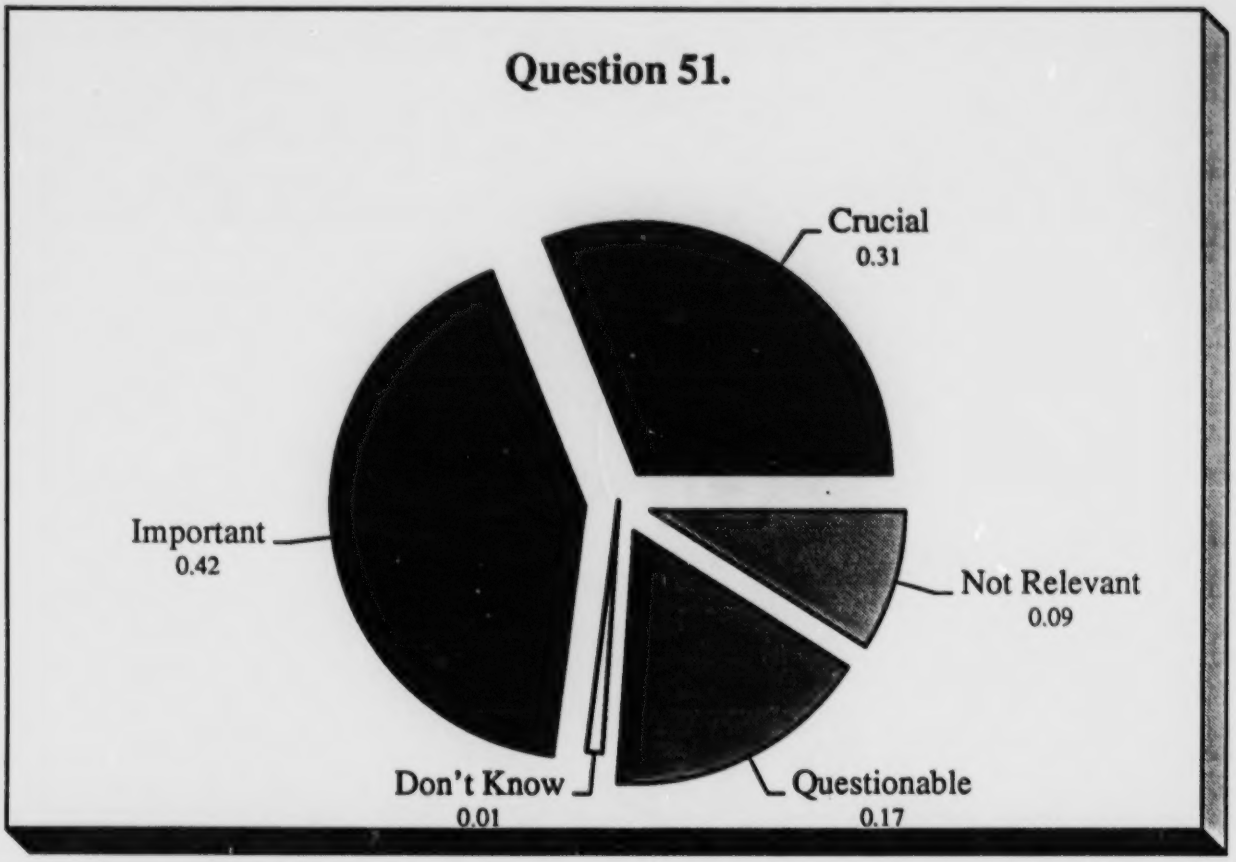
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply basic and advanced skills in helping processes, including empathic responding, self-disclosure, confrontation, process controls (e.g., goal-setting, beginning, ending, and terminating sessions, contracting), maintenance (e.g., external assignments, follow-up), and effectiveness evaluation?

Figure 68.



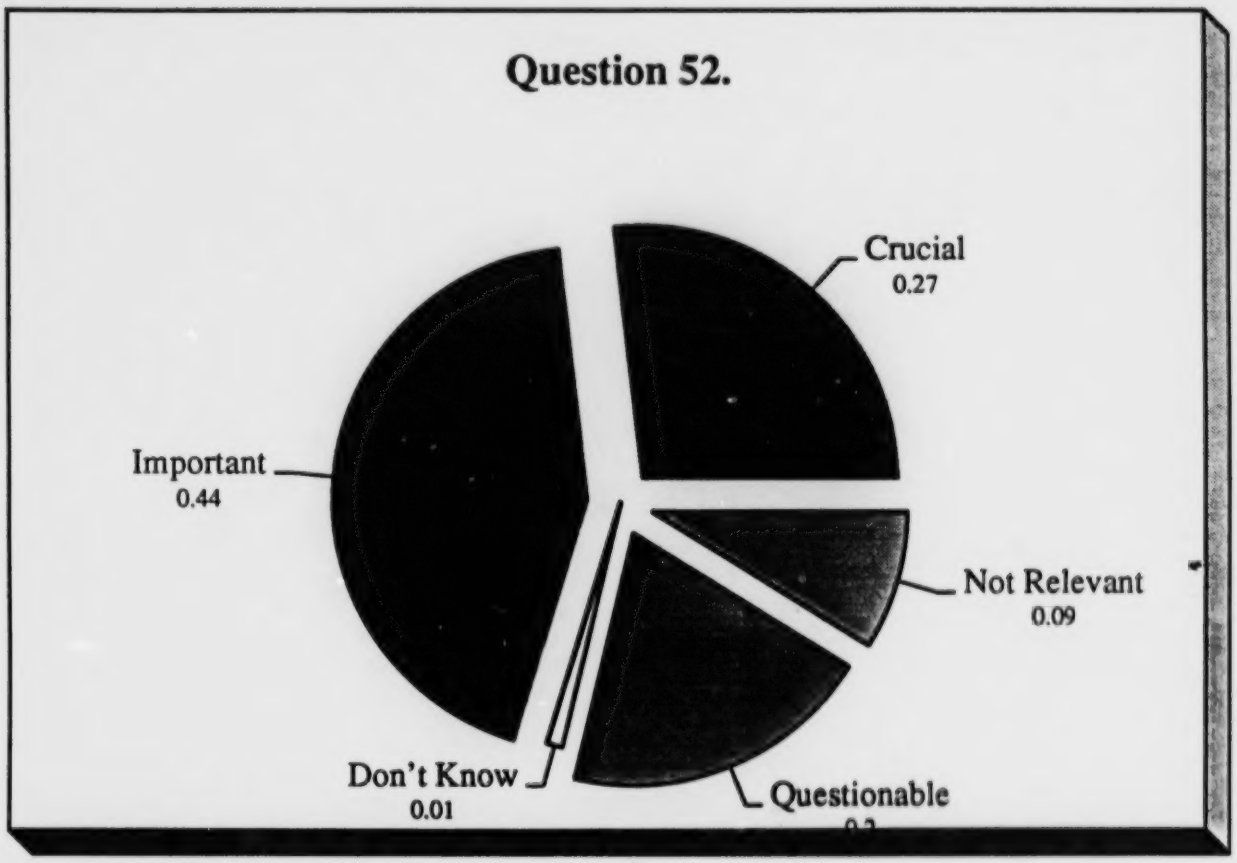
How relevant is knowledge in the area , principles of group dynamics, including group process components, developmental state theories, and behavioral indicators to the work you do as a practicing counselor?

Figure 69.



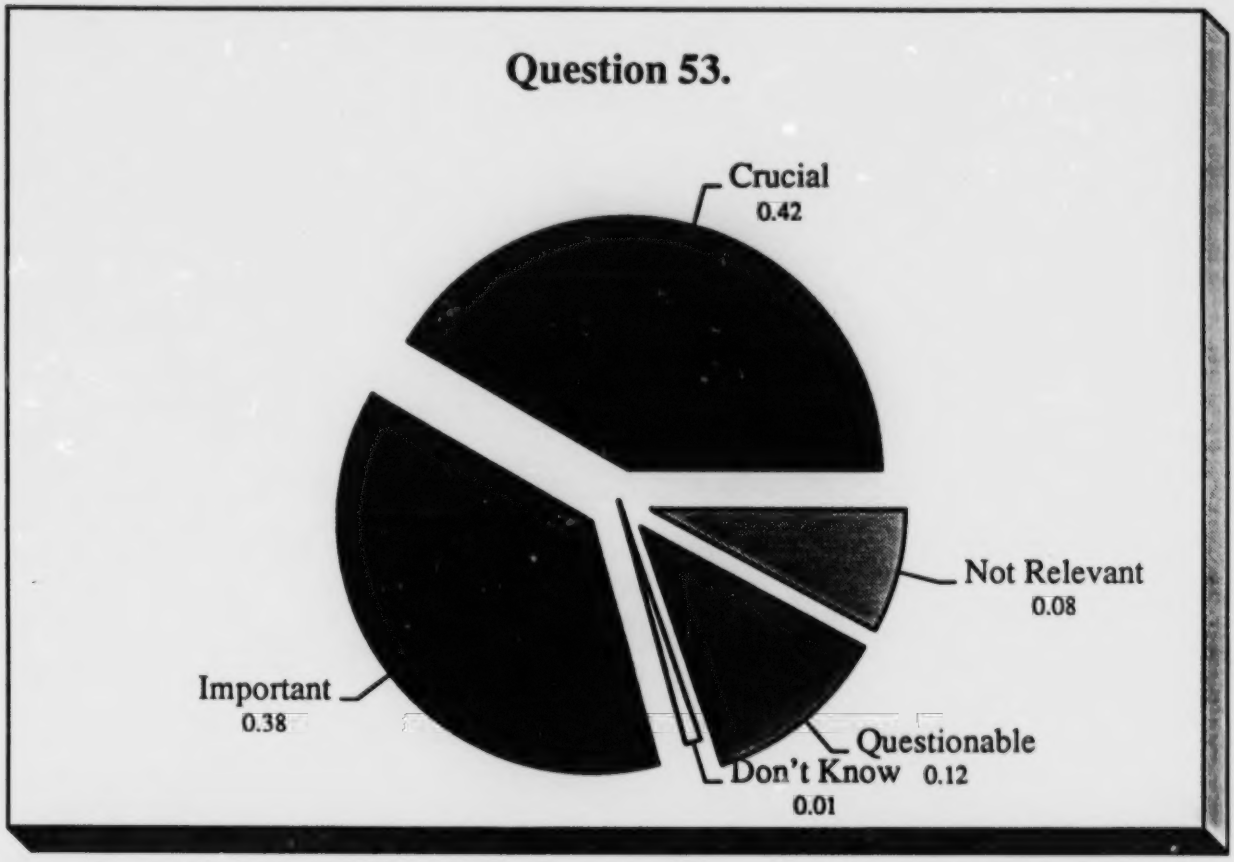
How relevant is knowledge in the area , group leadership styles and approaches, including characteristics of various types of group leaders and leadership styles and behavioral indicators,to the work you do as a practicing counselor?

Figure 70.



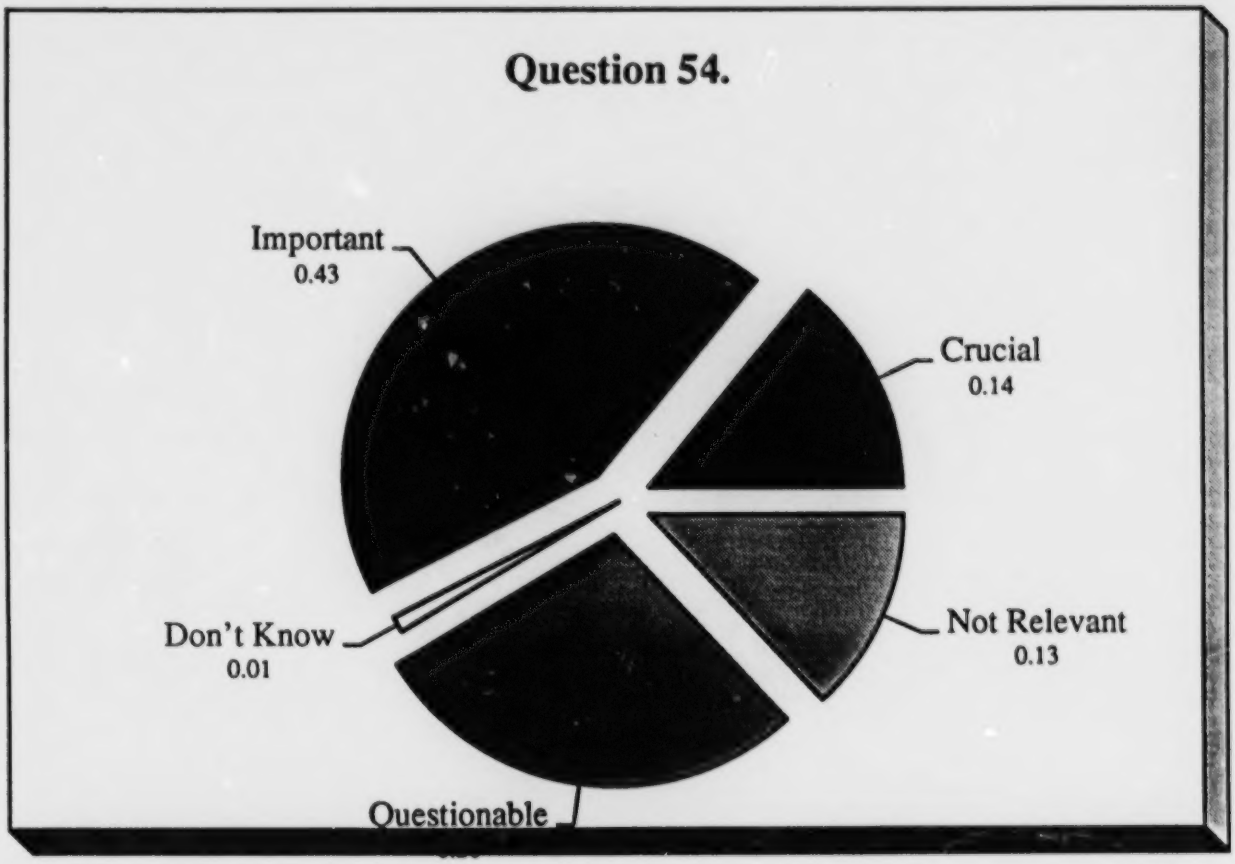
How relevant is knowledge in the area , theories of group counseling, including proponents, commonalities, distinguishing characteristics, pertinent research and literature, and behavioral manifestations, to the work you do as a practicing counselor?

Figure 71.



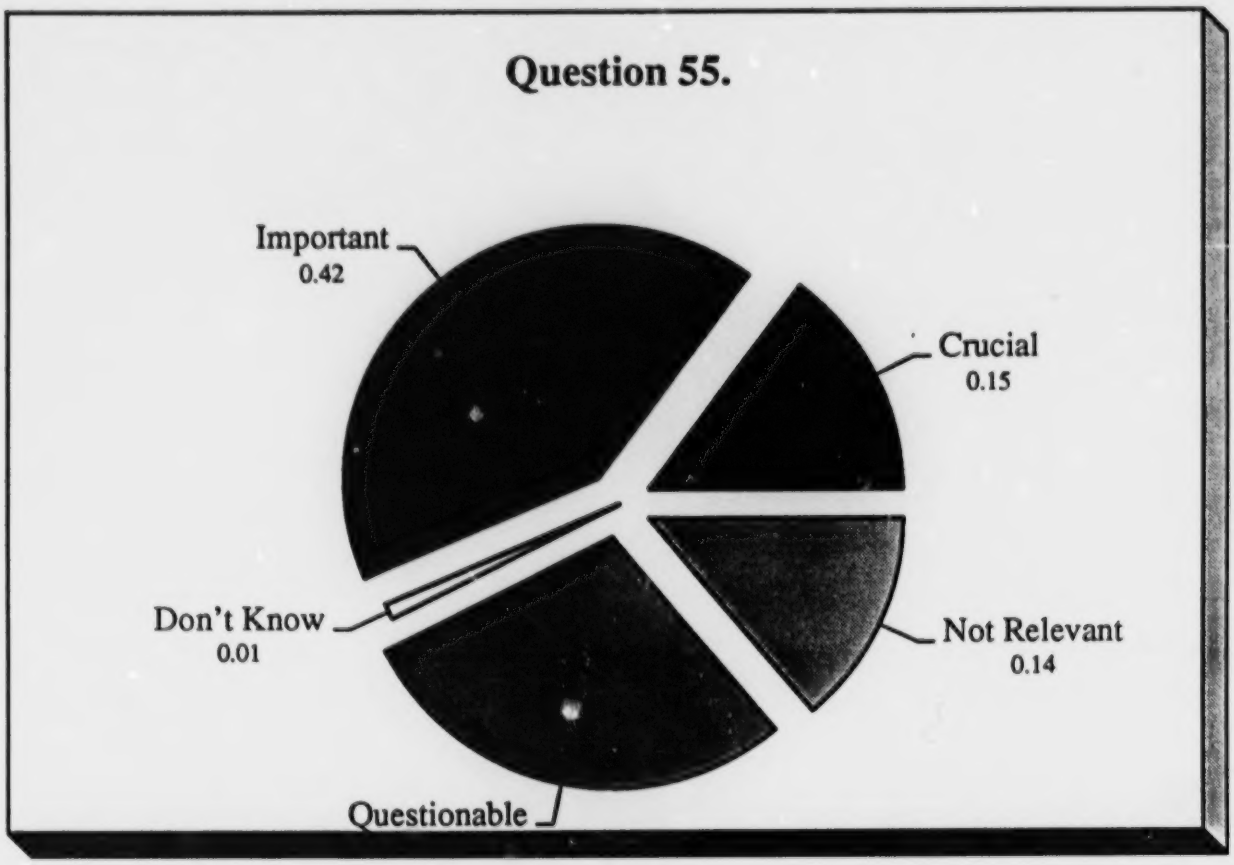
How relevant is knowledge in the area, group counseling methods, including group counselor orientations and behaviors, therapeutic ingredients, group members' roles and behaviors, ethical considerations, approach, selection criteria and methods, and methods of evaluating effectiveness, to the work you do as a practicing counselor?

Figure 72.



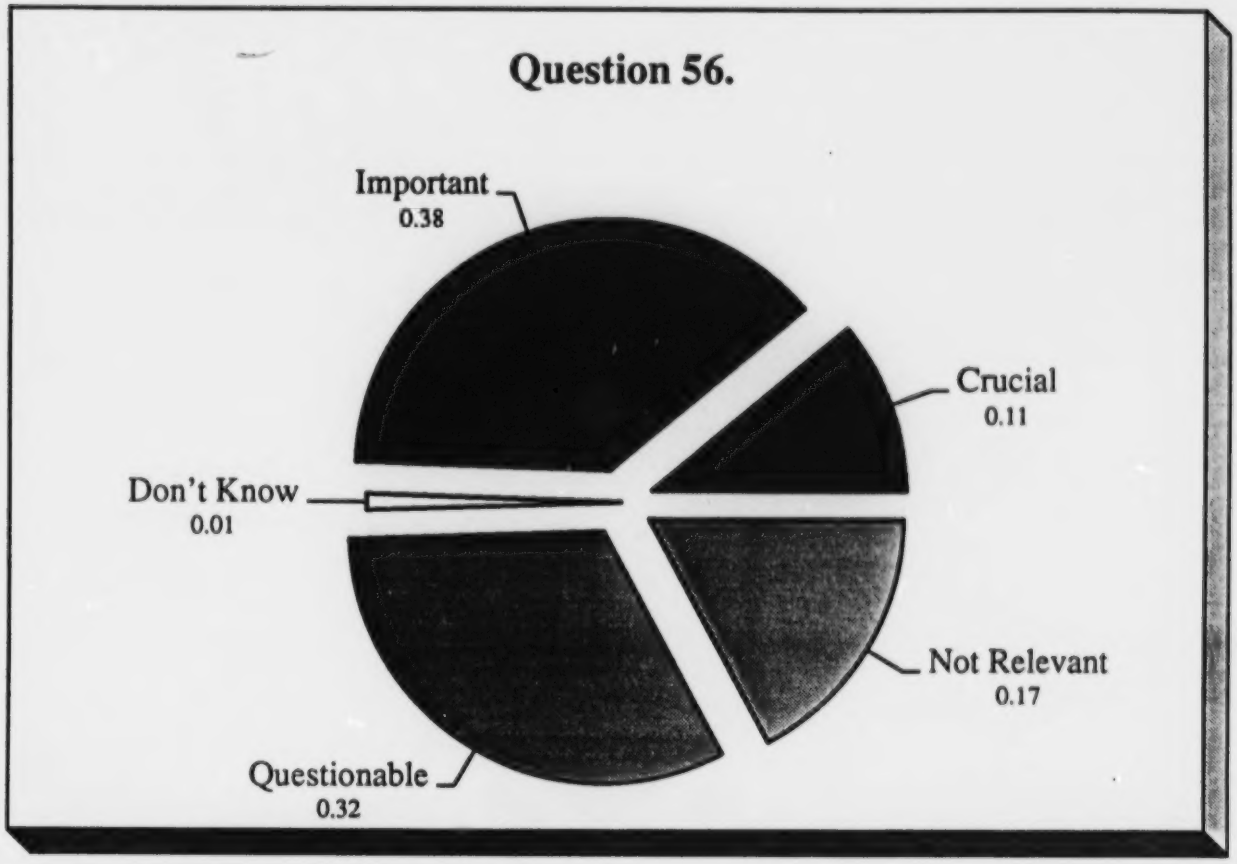
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, states of group development, including factors affecting stage progression?

Figure 73.



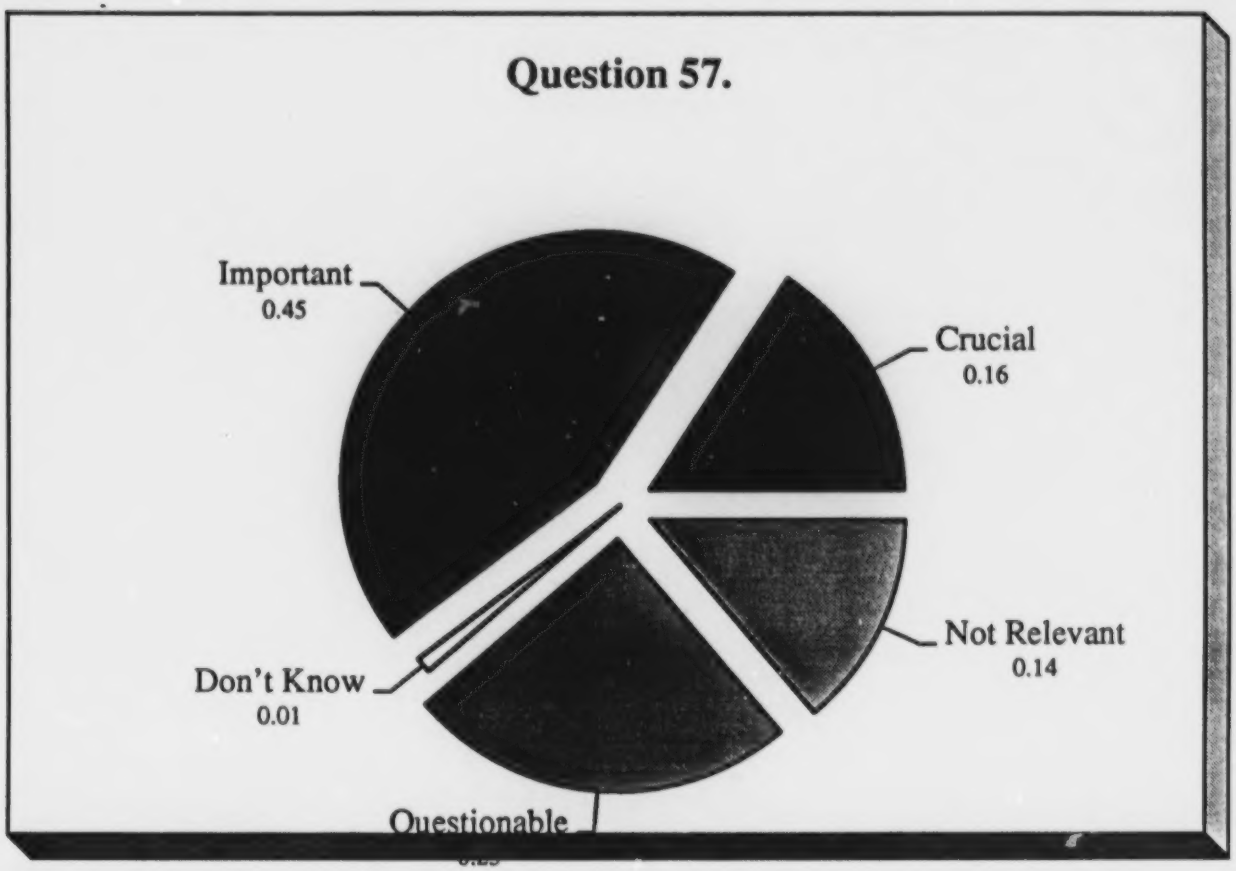
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, group leadership styles?

Figure 74.



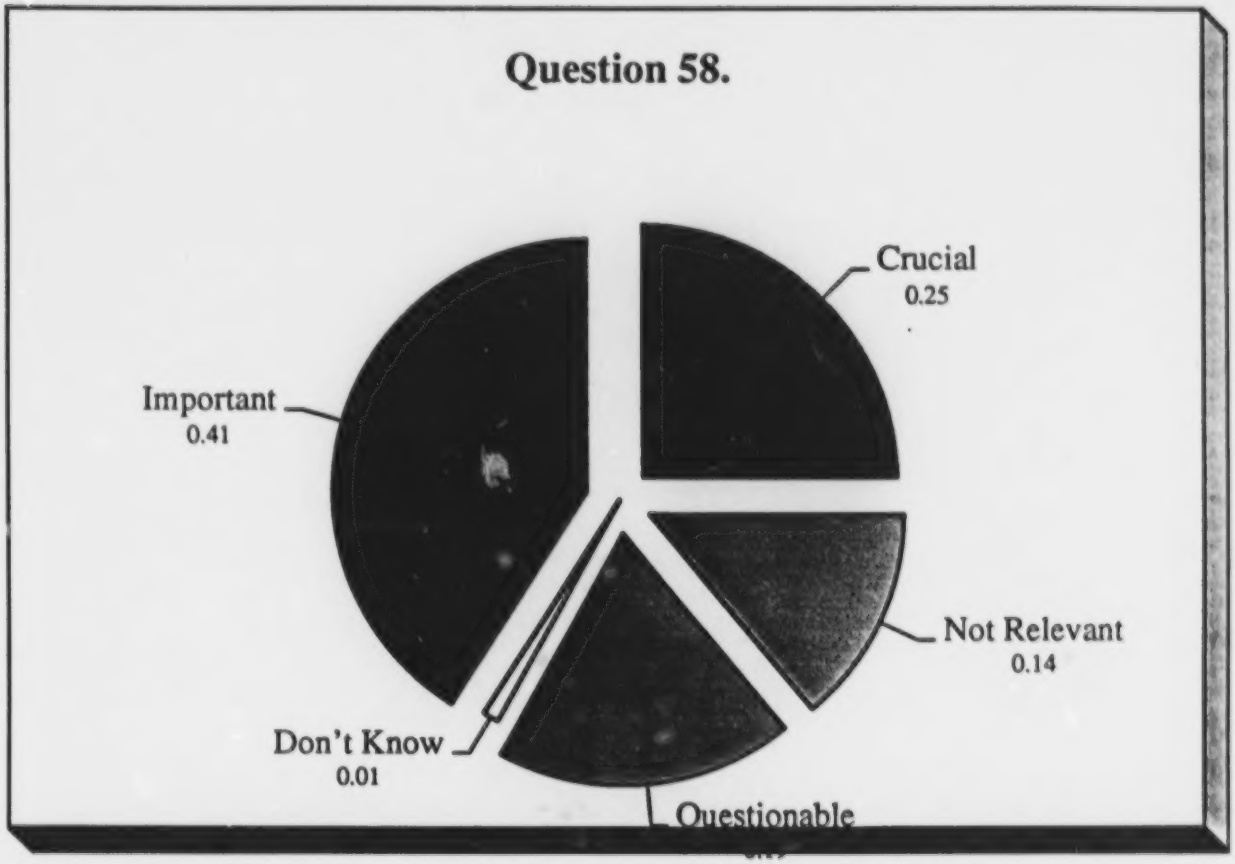
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, group counselor orientations to group counseling?

Figure 75.



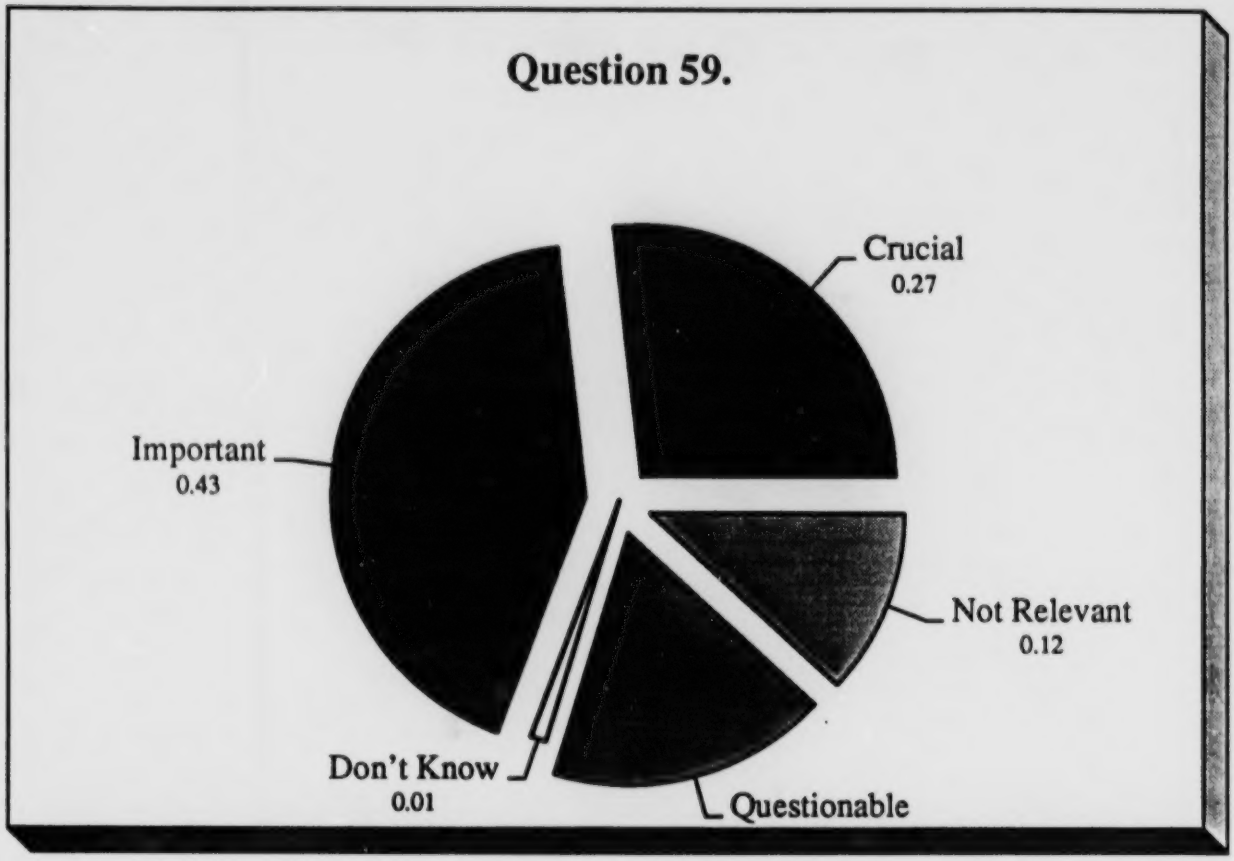
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, group counselor verbal and nonverbal behaviors?

Figure 76.



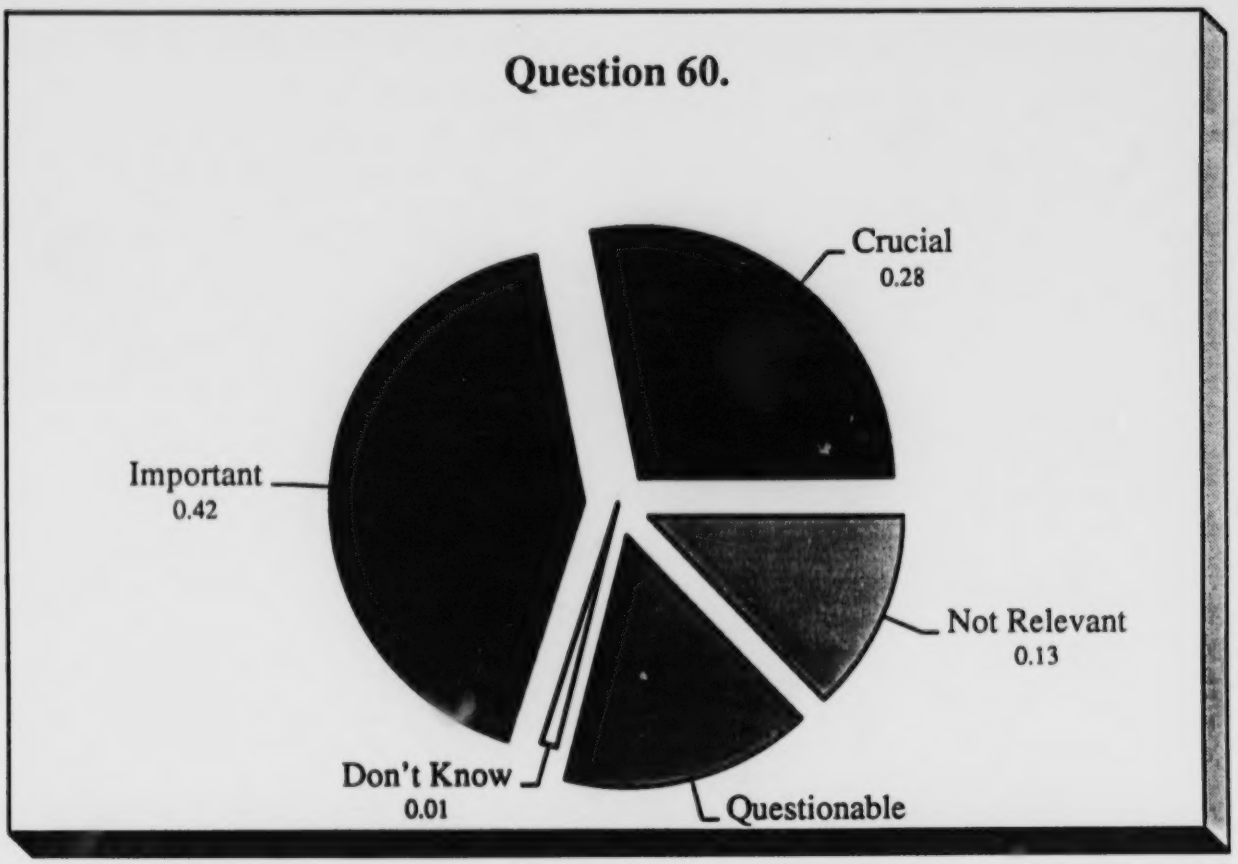
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, group member verbal and nonverbal behaviors?

Figure 77.



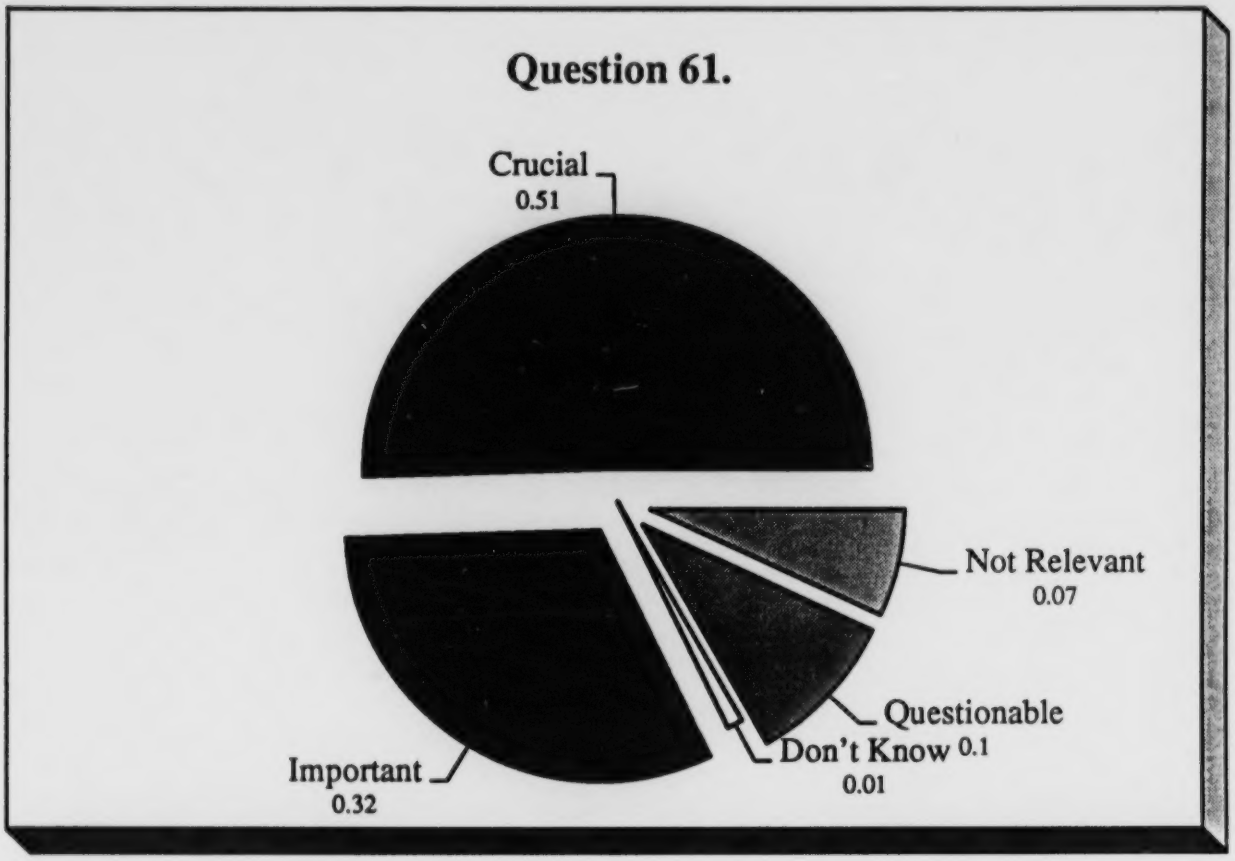
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain and self-evaluate group counseling skills?

Figure 78.



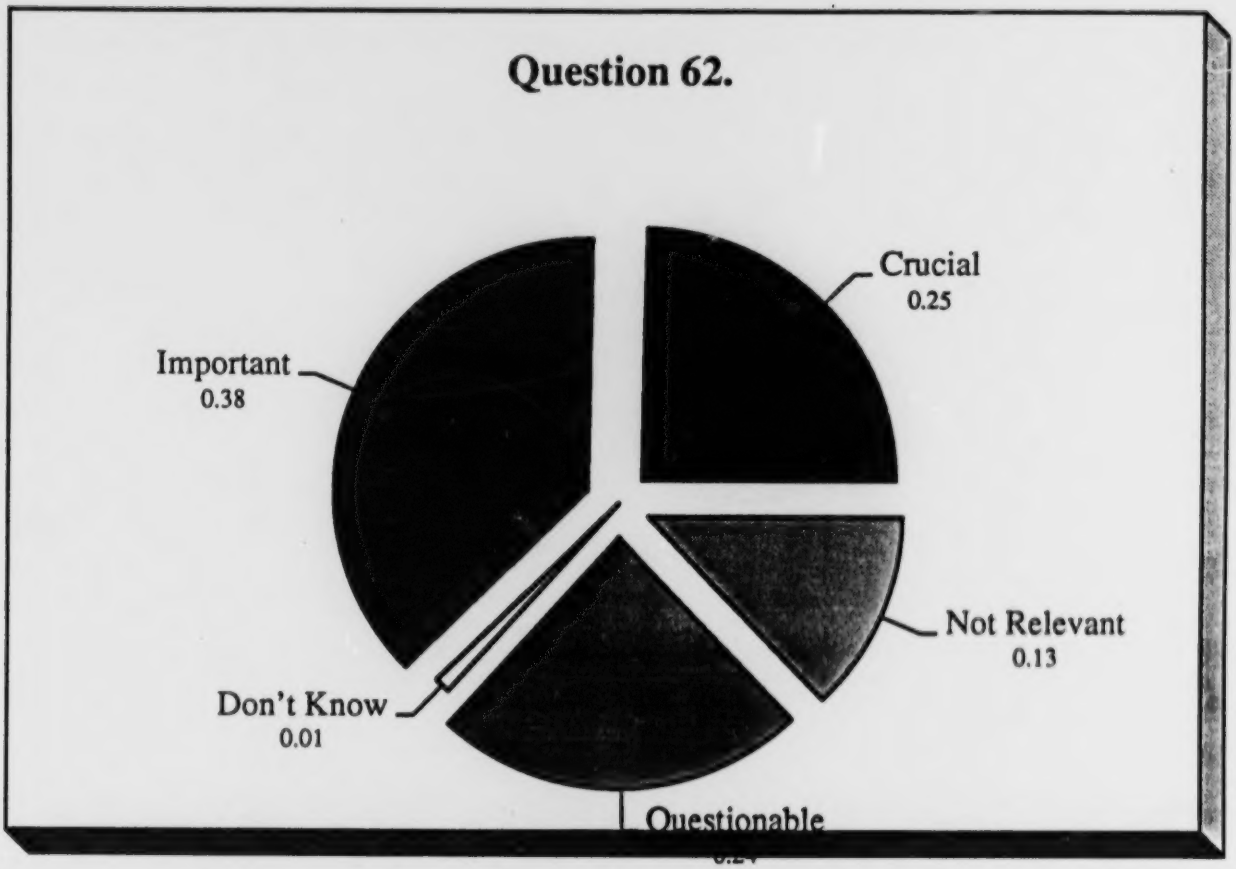
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply group member selection criteria and procedures?

Figure 79.



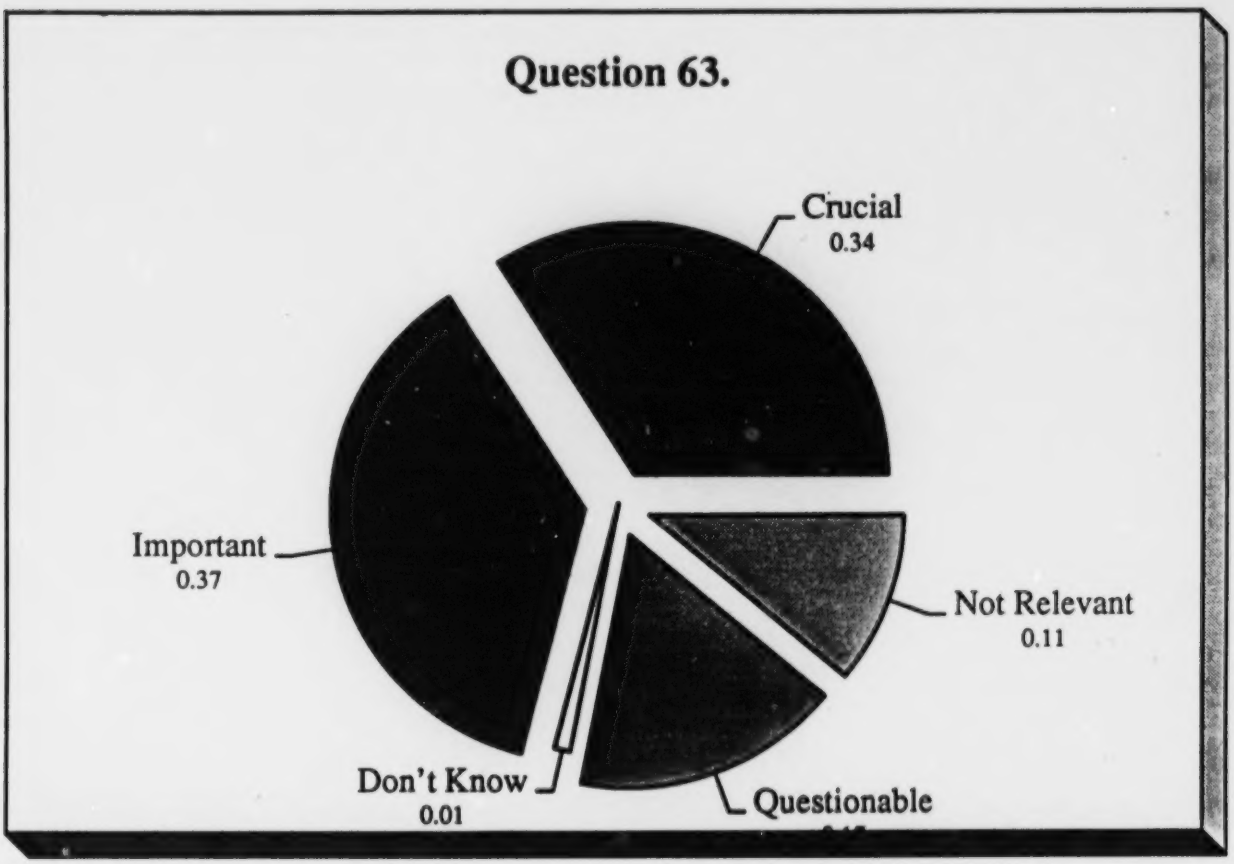
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply basic and advanced group counseling skills, including self-disclosures, empathic responses, confrontations, controls (e.g., beginning, ending, and terminating sessions, contracting), maintenance (e.g., external assignments, follow-up), and effectiveness evaluation?

Figure 80.



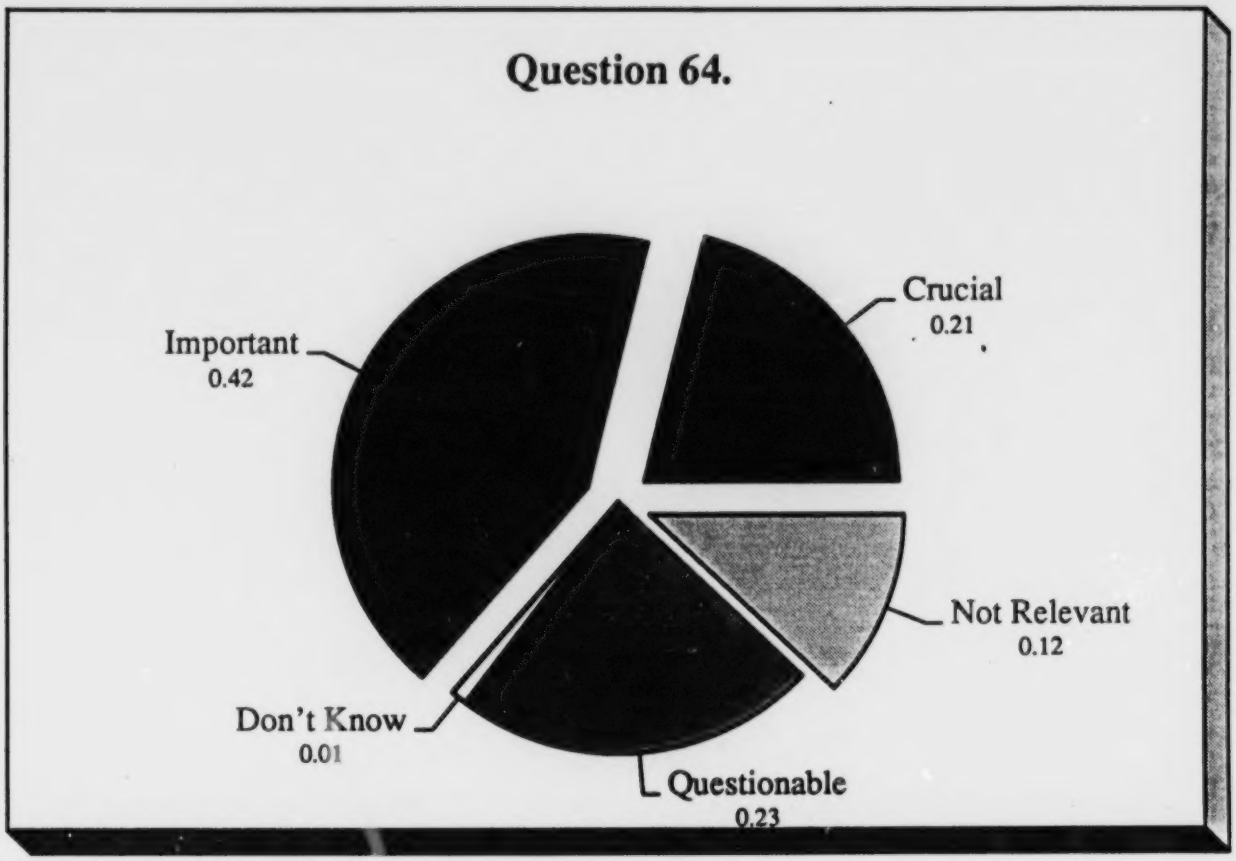
How relevant is knowledge in the area, major career development theories, including proponents, advantages and limitations, factors considered in application and behavioral manifestations, to the work you do as a practicing counselor?

Figure 81.



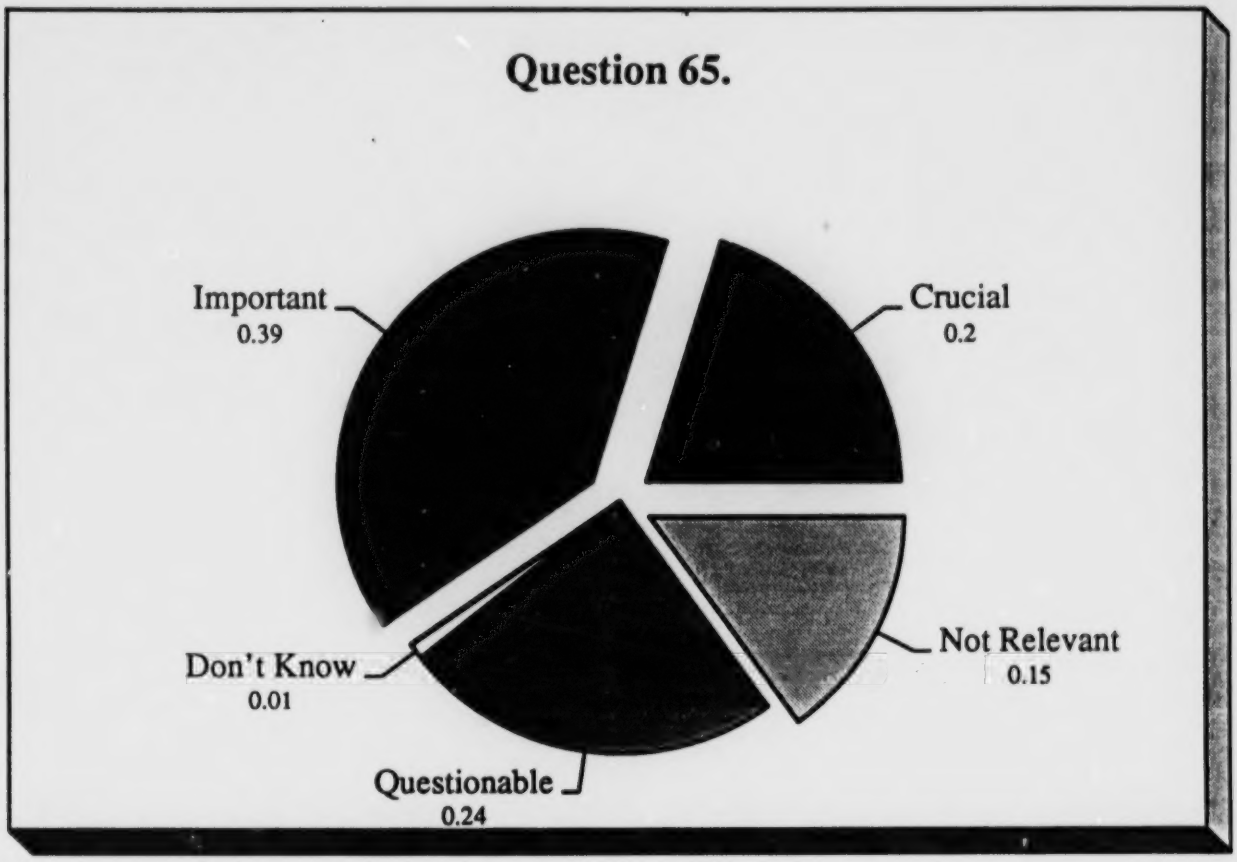
How relevant is knowledge in the area, occupational and educational information, including local and national sources, print media and computerized information systems, and interactive computer sources, to the work you do as a practicing counselor?

Figure 82.



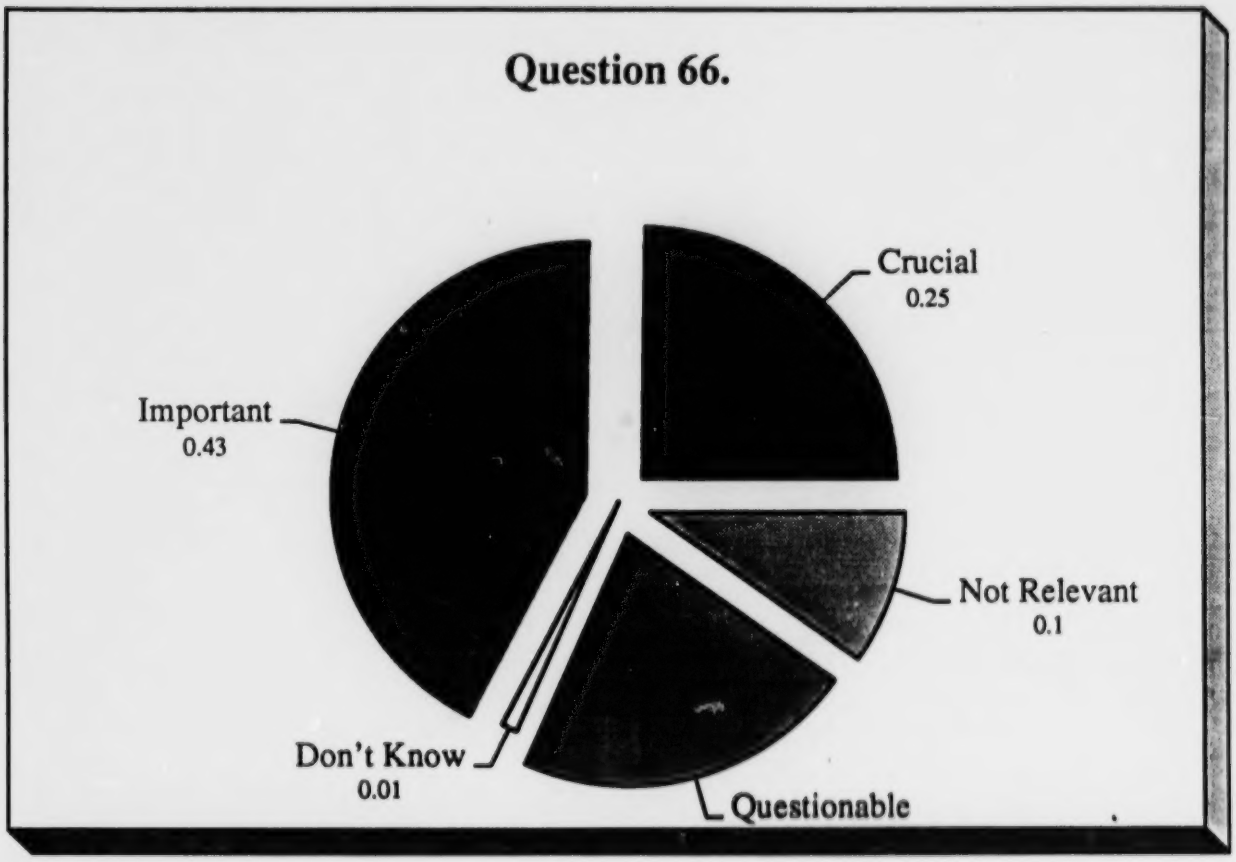
How relevant is knowledge in the area, major career and leisure counseling, guidance and education theories, including proponents, advantages and limitations, factors considered in application, and behavioral manifestations, to the work you do as a practicing counselor?

Figure 83.



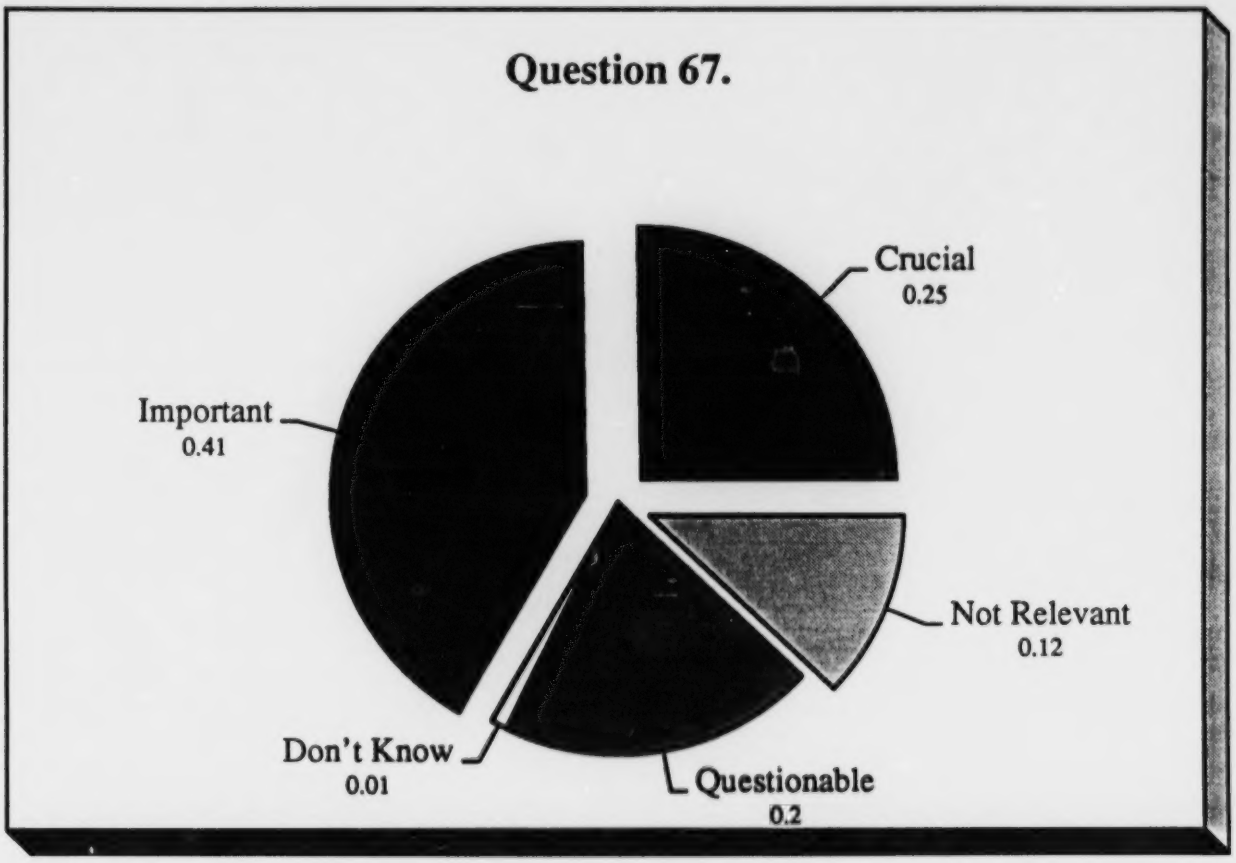
How relevant is knowledge in the area, basic and advanced career and leisure counseling, guidance, and education skills, including philosophic and theoretical bases, factors considered in application, behavioral manifestations, and methods of evaluation of effectiveness, to the work you do as a practicing counselor?

Figure 84.



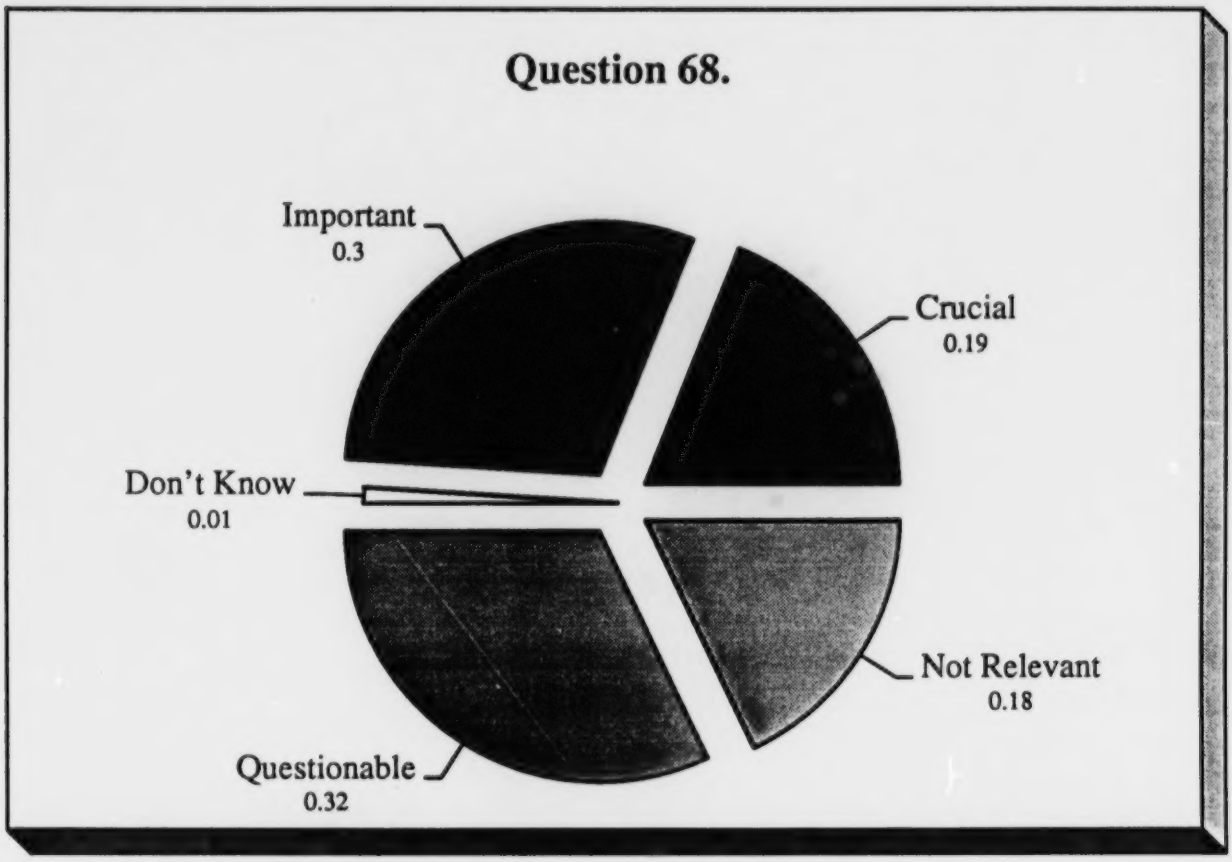
How relevant is knowledge in the area, major theories of career and life style decision-making, including proponents, models, advantages and limitation, factors considered in application, and behavioral manifestations, to the work you do as a practicing counselor?

Figure 85.



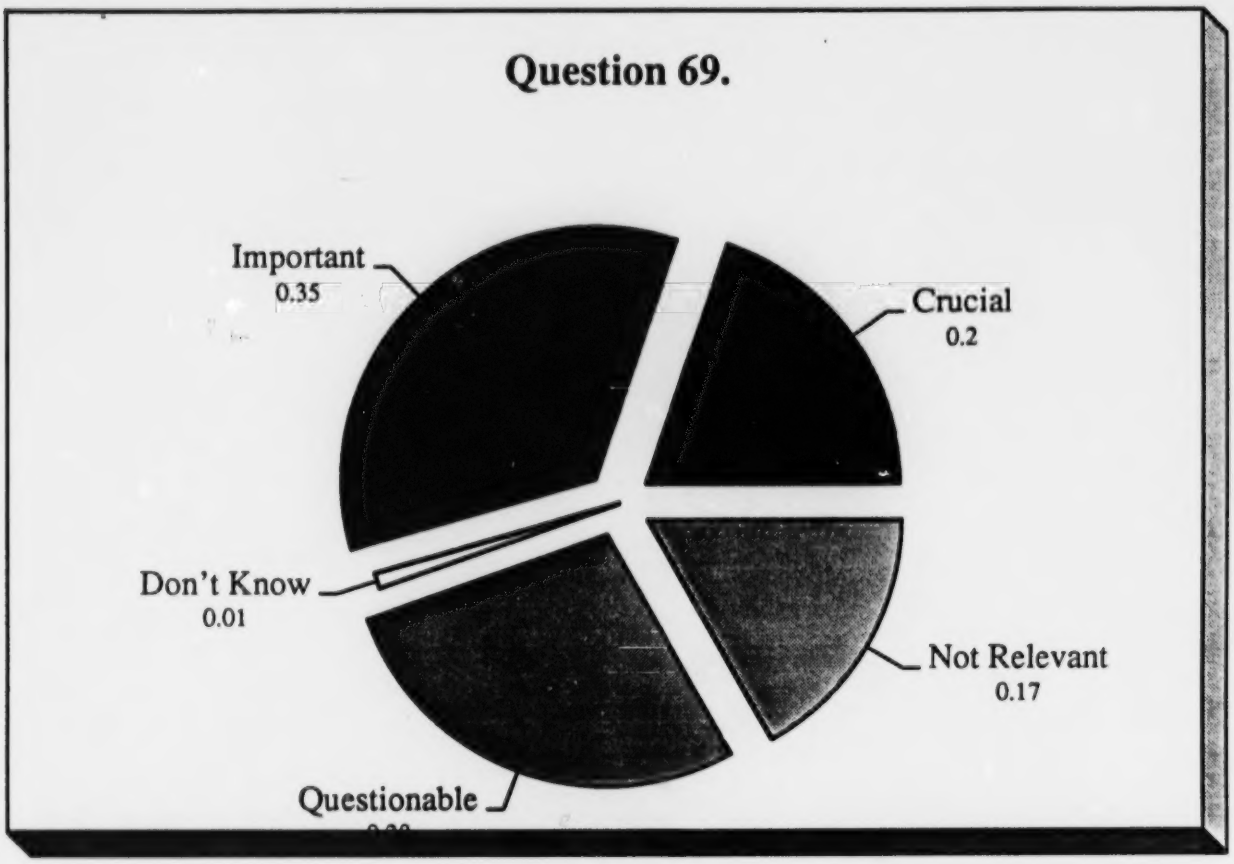
How relevant is knowledge in the area, career development and counseling program planning, including major models, philosophic and theoretical bases, advantages and limitations, factors considered in implementation, and types and methods for evaluating program effectiveness, to the work you do as a practicing counselor?

Figure 86.



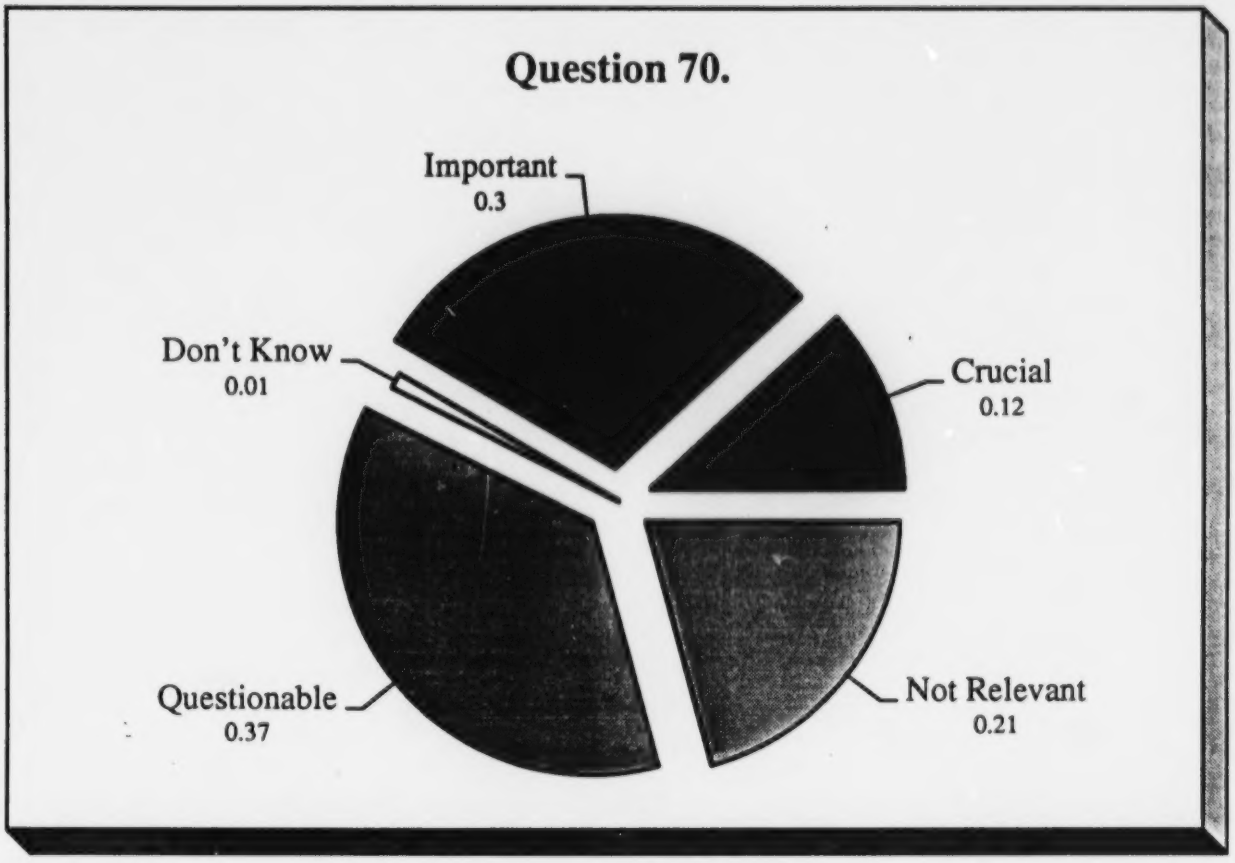
How relevant to the work you do as a practicing counselor is knowledge of the skills: explain, in operational terms, major career development theories?

Figure 87.



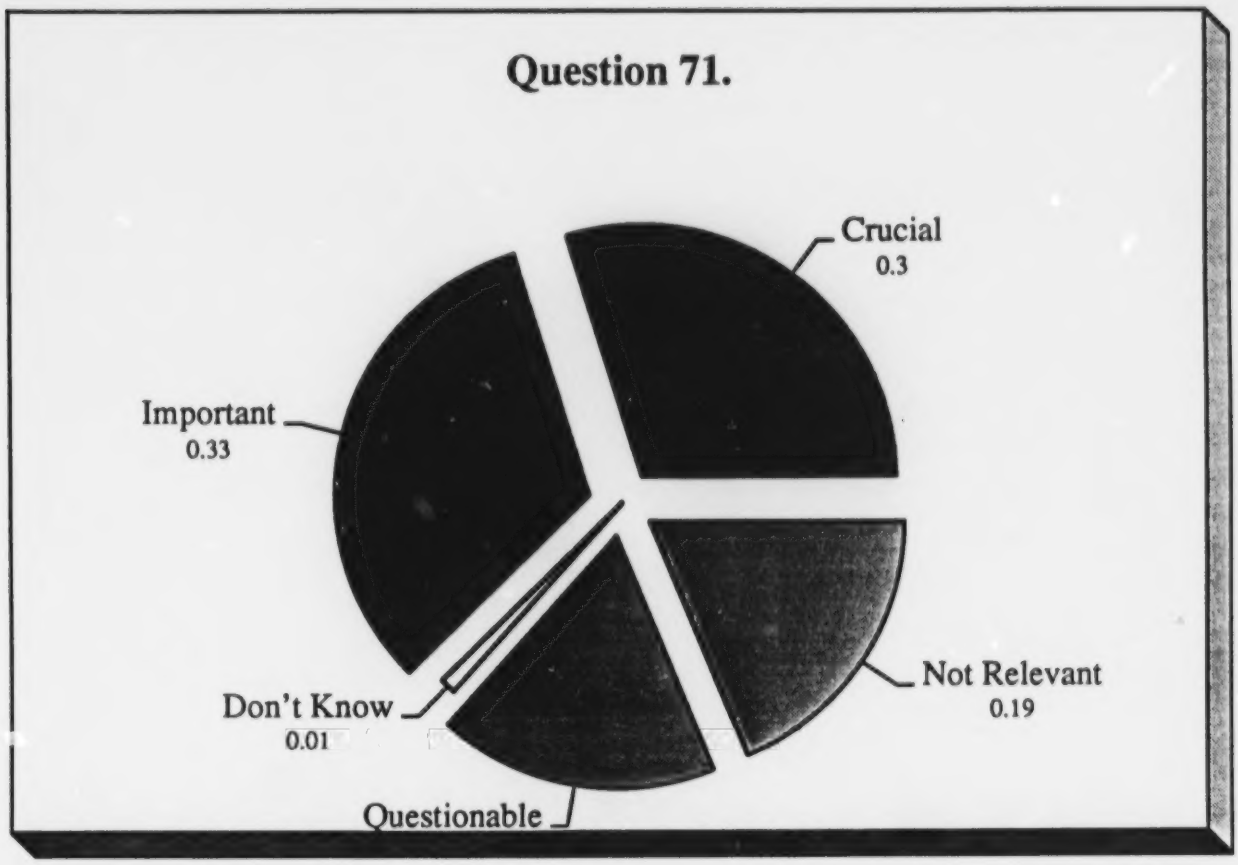
How relevant to the work you do as a practicing counselor is knowledge of the skills: explain, in operational terms, occupational and education information systems?

Figure 88.



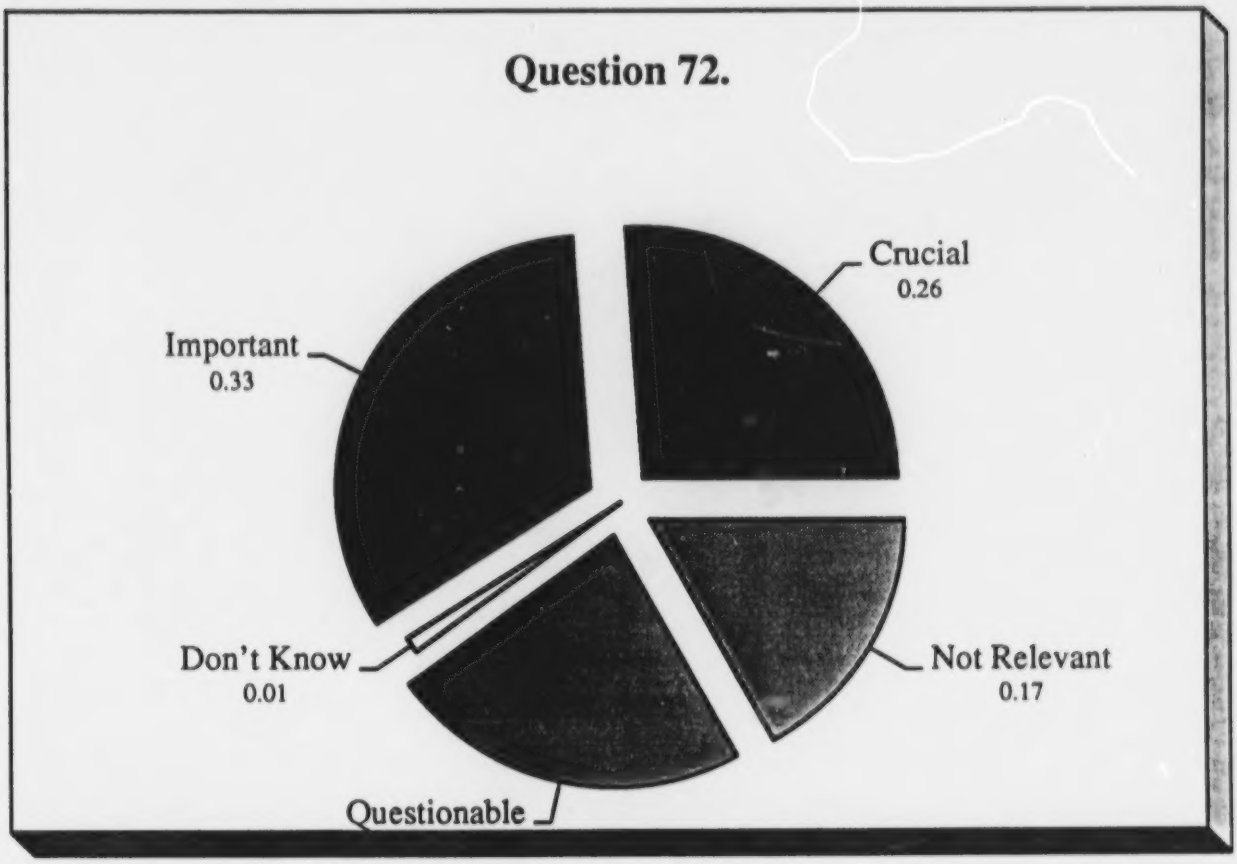
How relevant to the work you do as a practicing counselor is knowledge of the skills: explain, in operational terms, major career and leisure counseling, guidance, and education theories?

Figure 89.



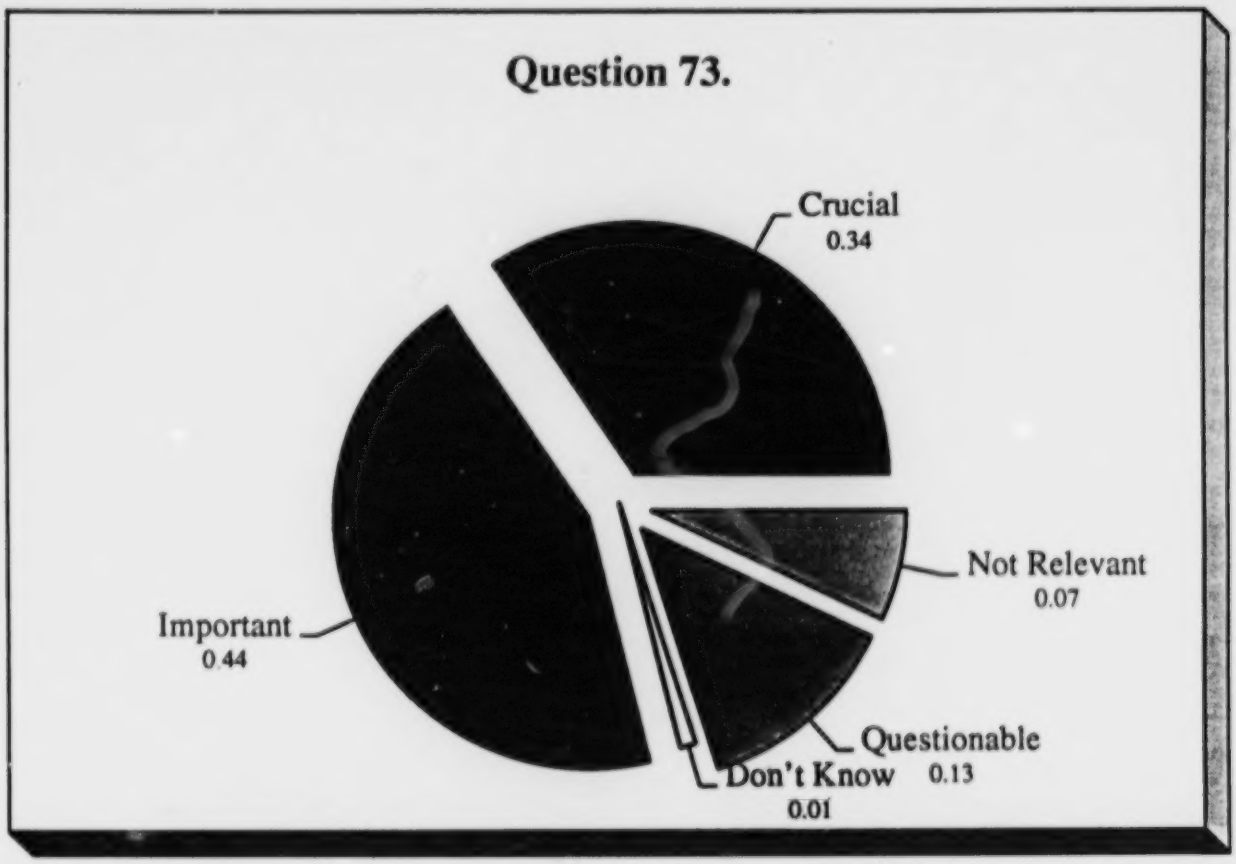
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply basic and advanced career counseling, guidance, and education skills, including facilitation of counselee self- exploration and evaluation, use of assessment instruments and techniques, integration of occupational and educational information, and evaluation of effectiveness?

Figure 90.



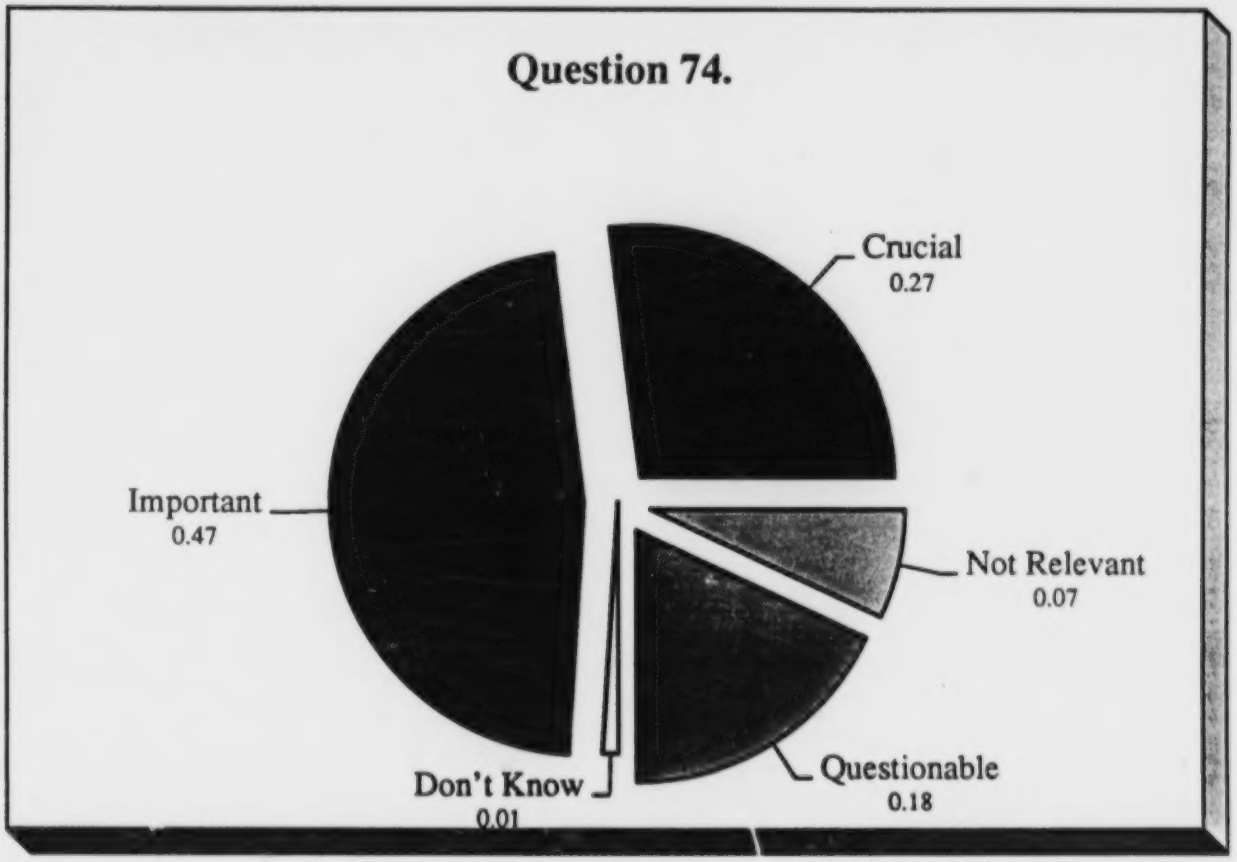
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply principles of career development and counseling program planning in implementation and evaluation of program effectiveness?

Figure 91.



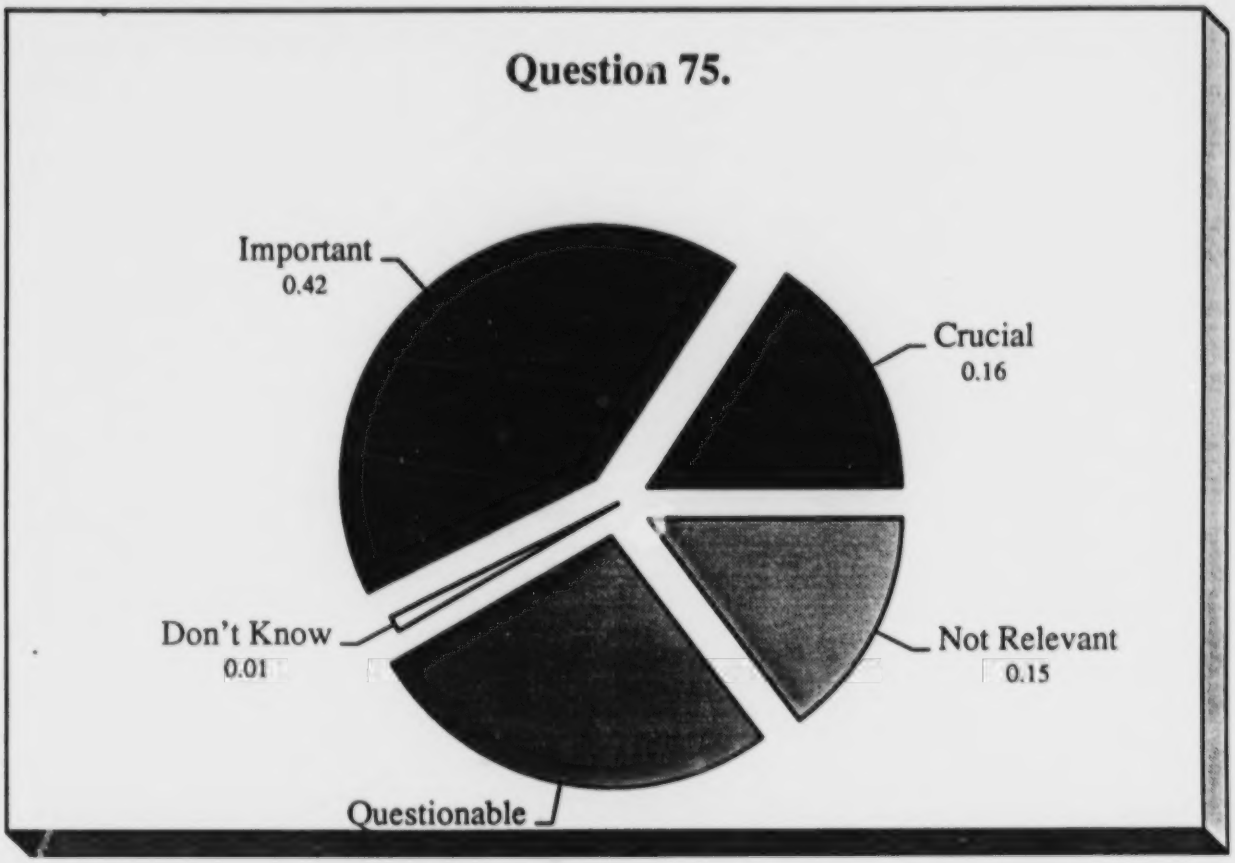
How relevant is knowledge is the area, types of educational and psychological assessment, including group and individual approaches to intelligence, aptitude, achievement, interest, and personality assessment, and similarities and differences among these approaches, to the work you do as a practicing counselor?

Figure 92.



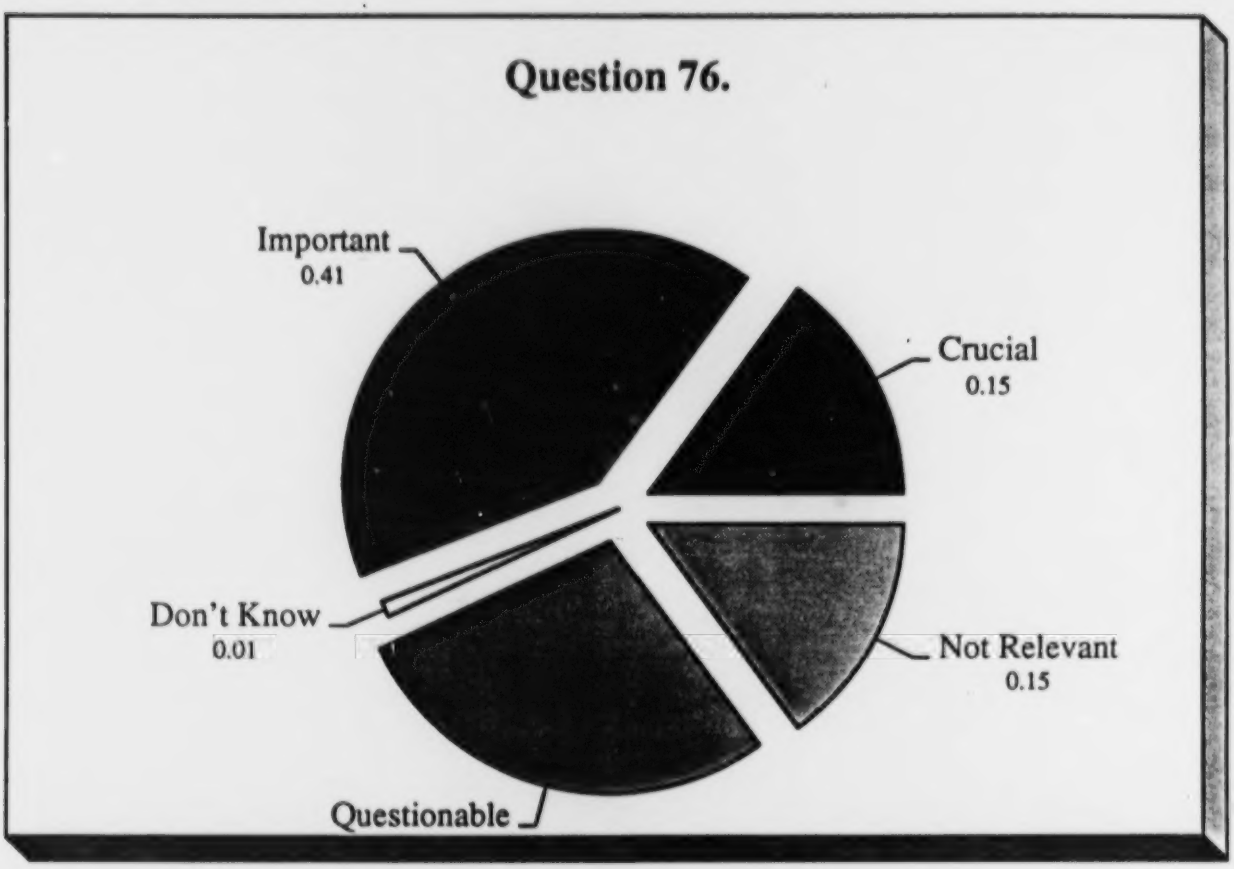
How relevant is knowledge is the area, theoretical bases for assessment techniques and methods of interpreting assessment data and information, to the work you do as a practicing counselor?

Figure 93.



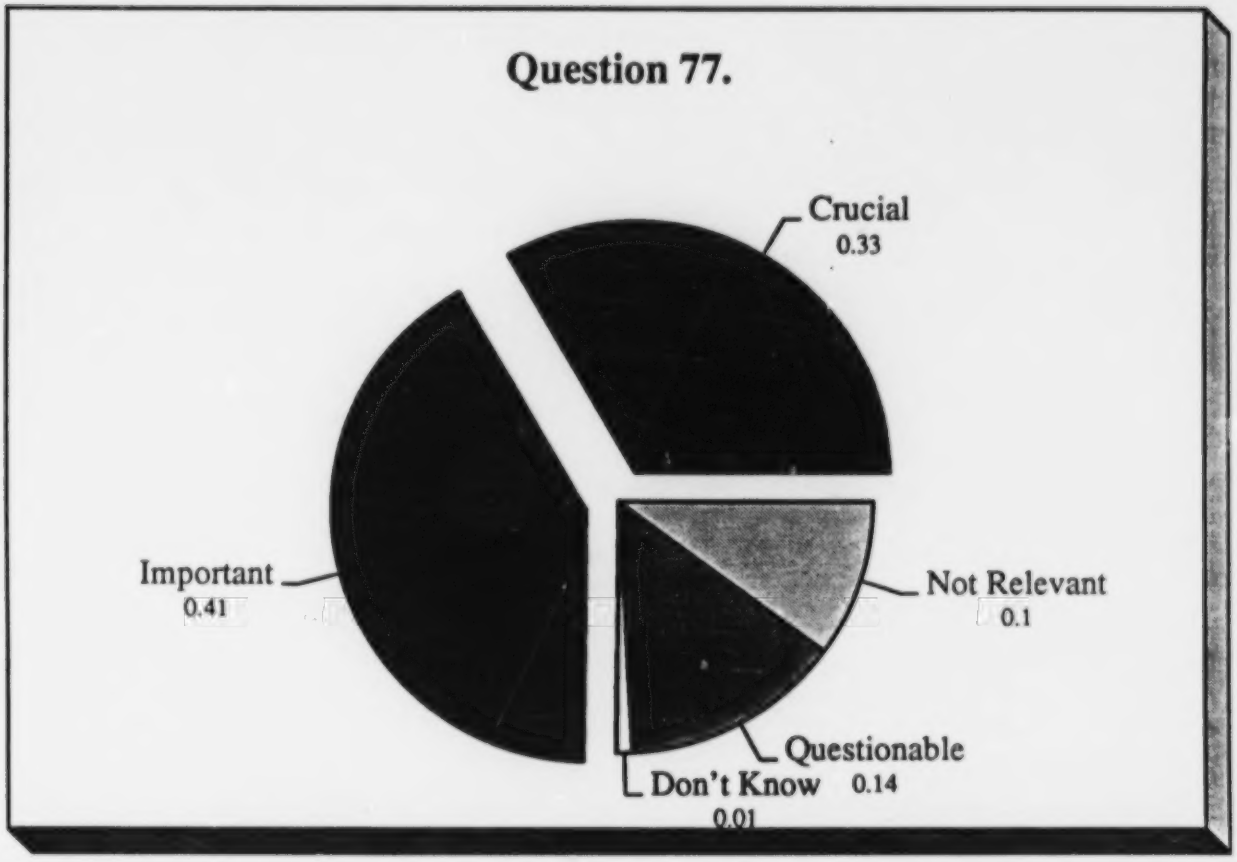
How relevant is knowledge is the area,validity, including methods for obtaining content, construct, predictive and concurrent evidence of validity, to the work you do as a practicing counselor?

Figure 94.



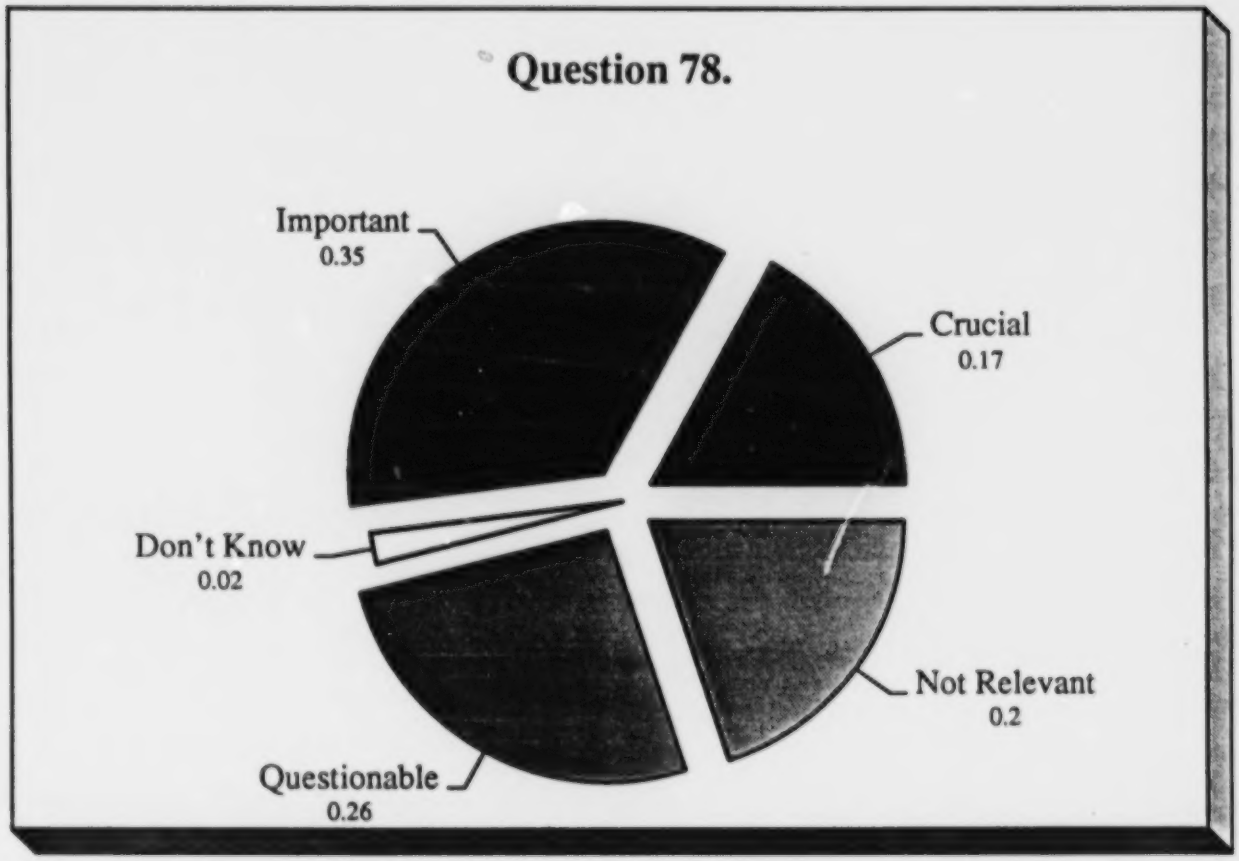
How relevant is knowledge is the area, reliability, including methods for estimating stability, internal, and equivalent types of reliability, to the work you do as a practicing counselor?

Figure 95.



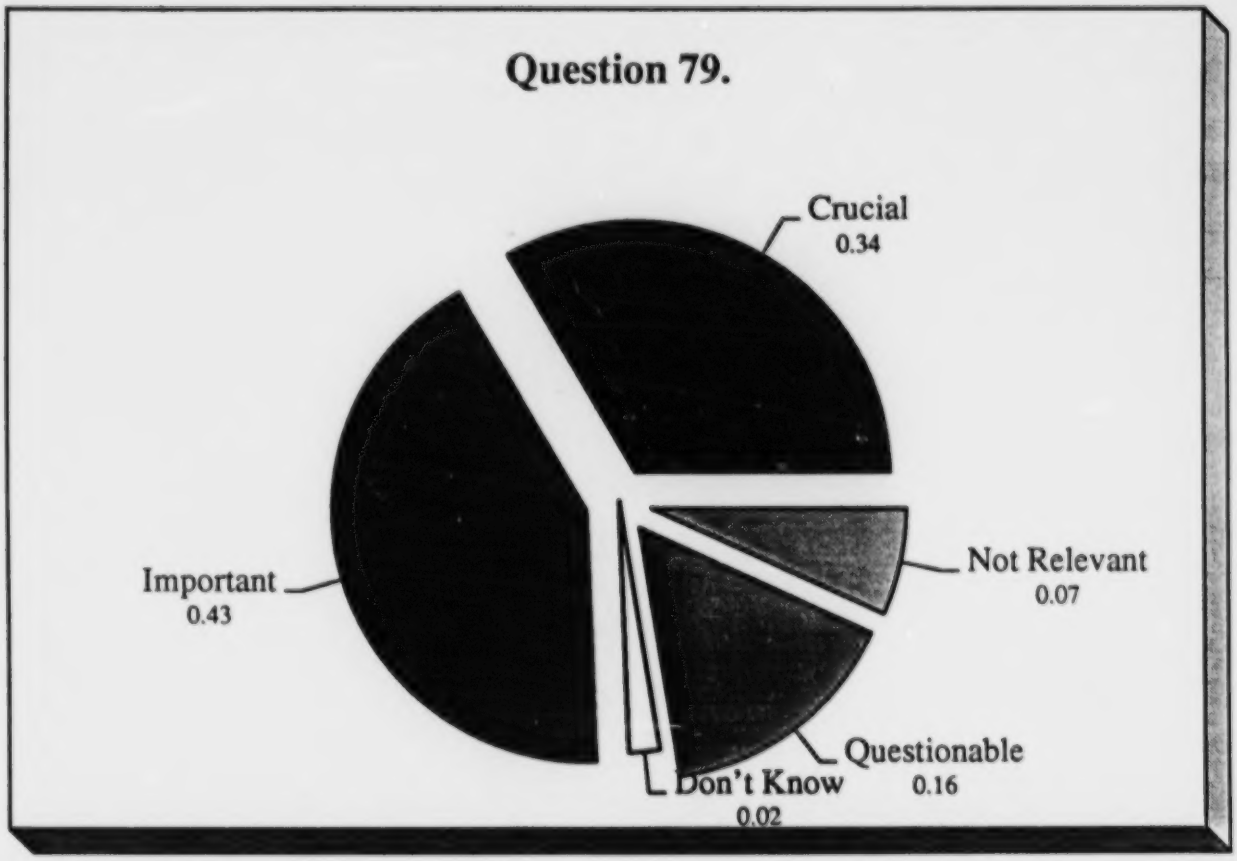
How relevant is knowledge is the area, major assessment methods, including group and individual test and inventory methods, behavioral observations, and computer-managed and computer-assisted methods, to the work you do as a practicing counselor?

Figure 96.



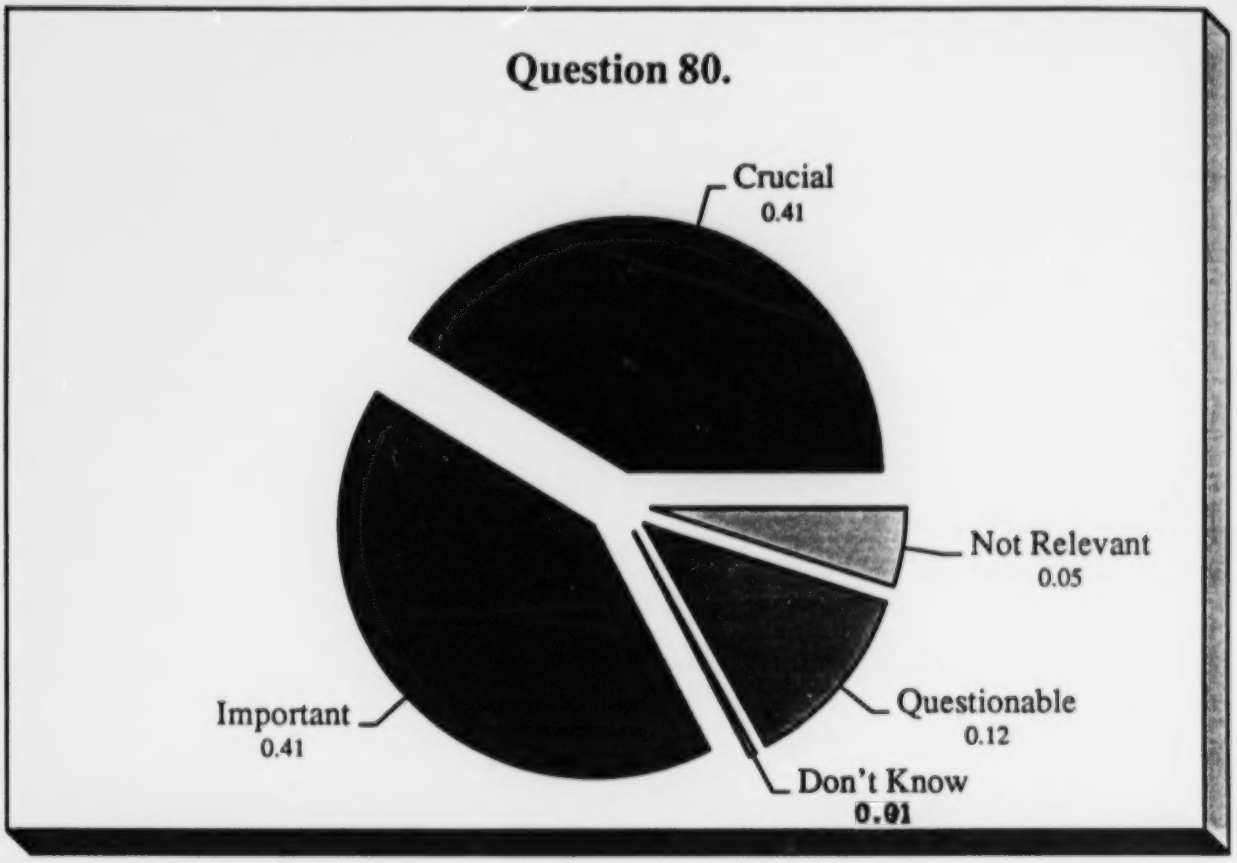
How relevant is knowledge is the area, psychometric statistics, including types of test scores, measures of central tendency, indices of variability, standard errors, and correlations,to the work you do as a practicing counselor?

Figure 97.



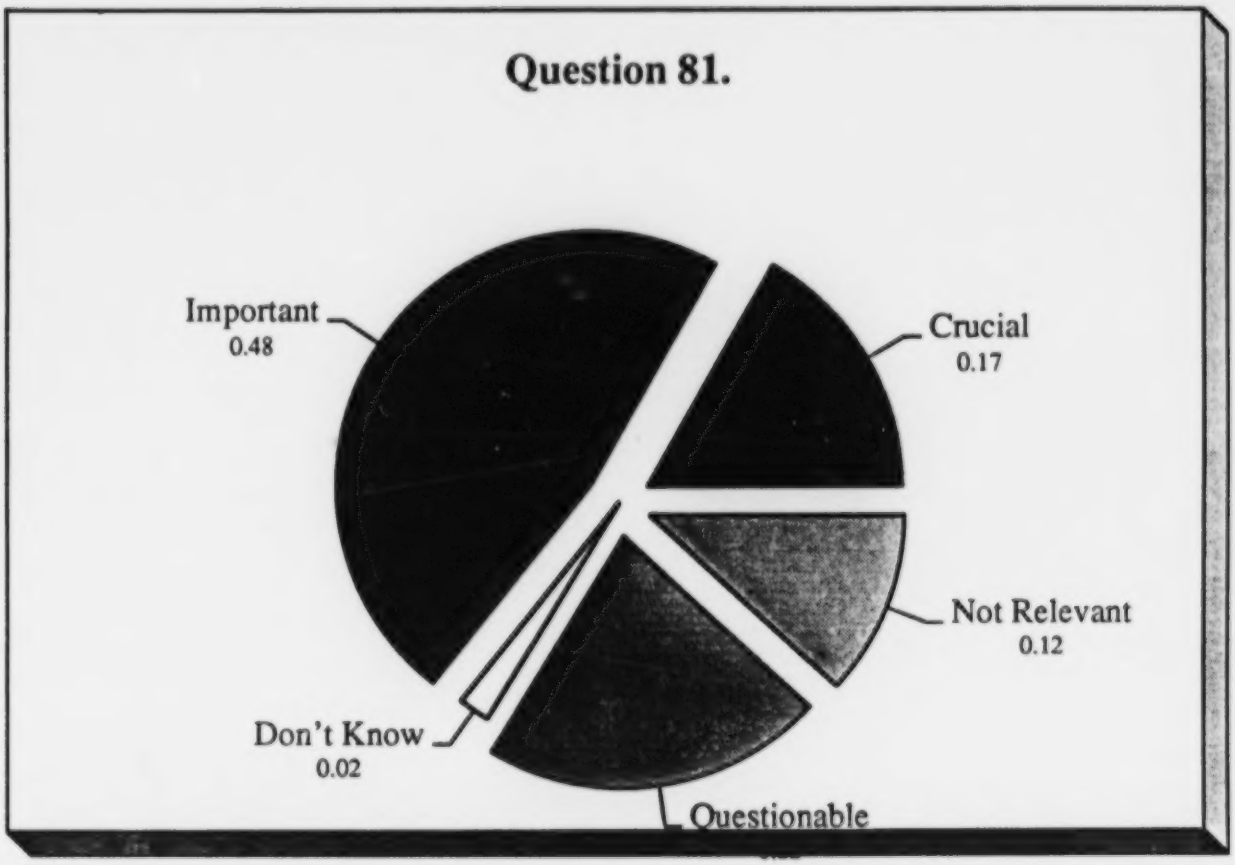
How relevant is knowledge is the area, principles of assessment of data and interpretation of information in the helping processes, to the work you do as a practicing counselor?

Figure 98.



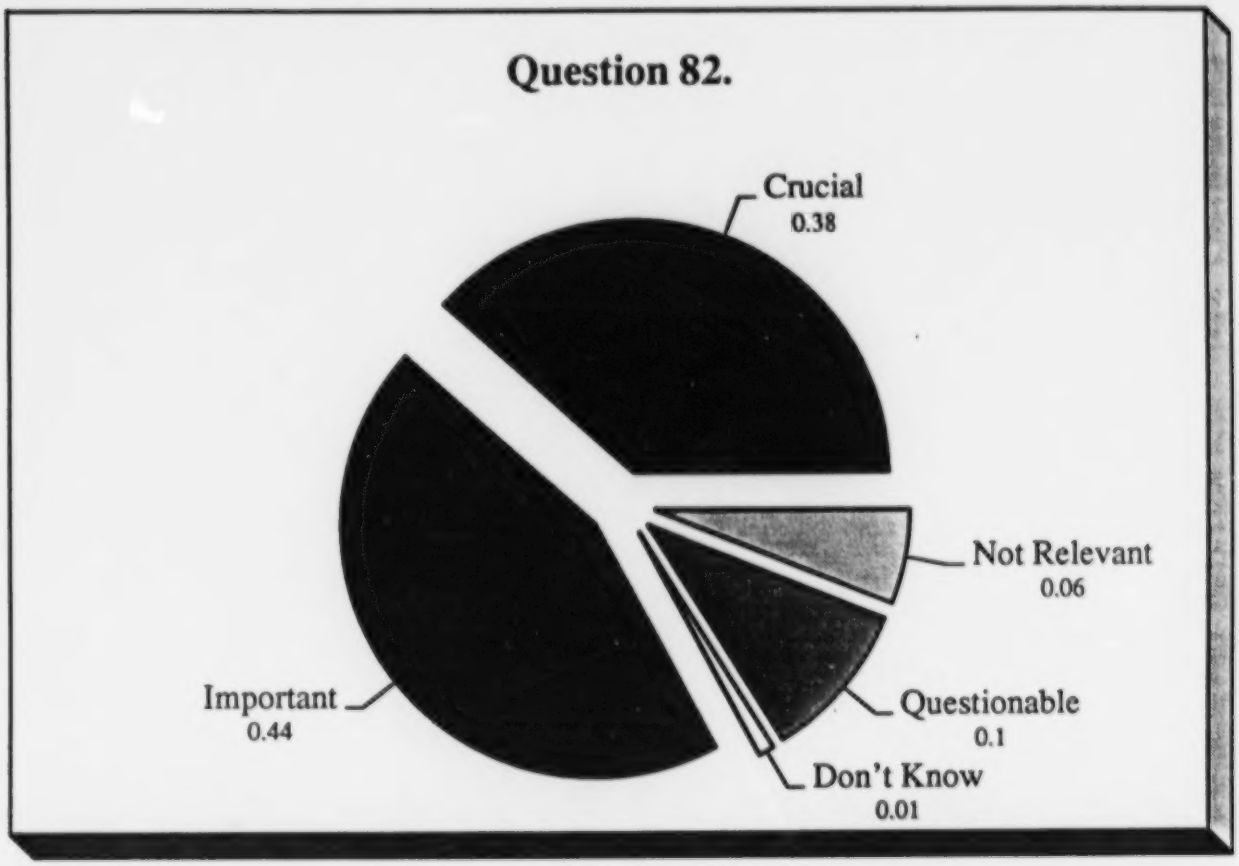
How relevant is knowledge is the area, ethical and legal considerations in the use of assessment data and information in helping processes, to the work you do as a practicing counselor?

Figure 99.



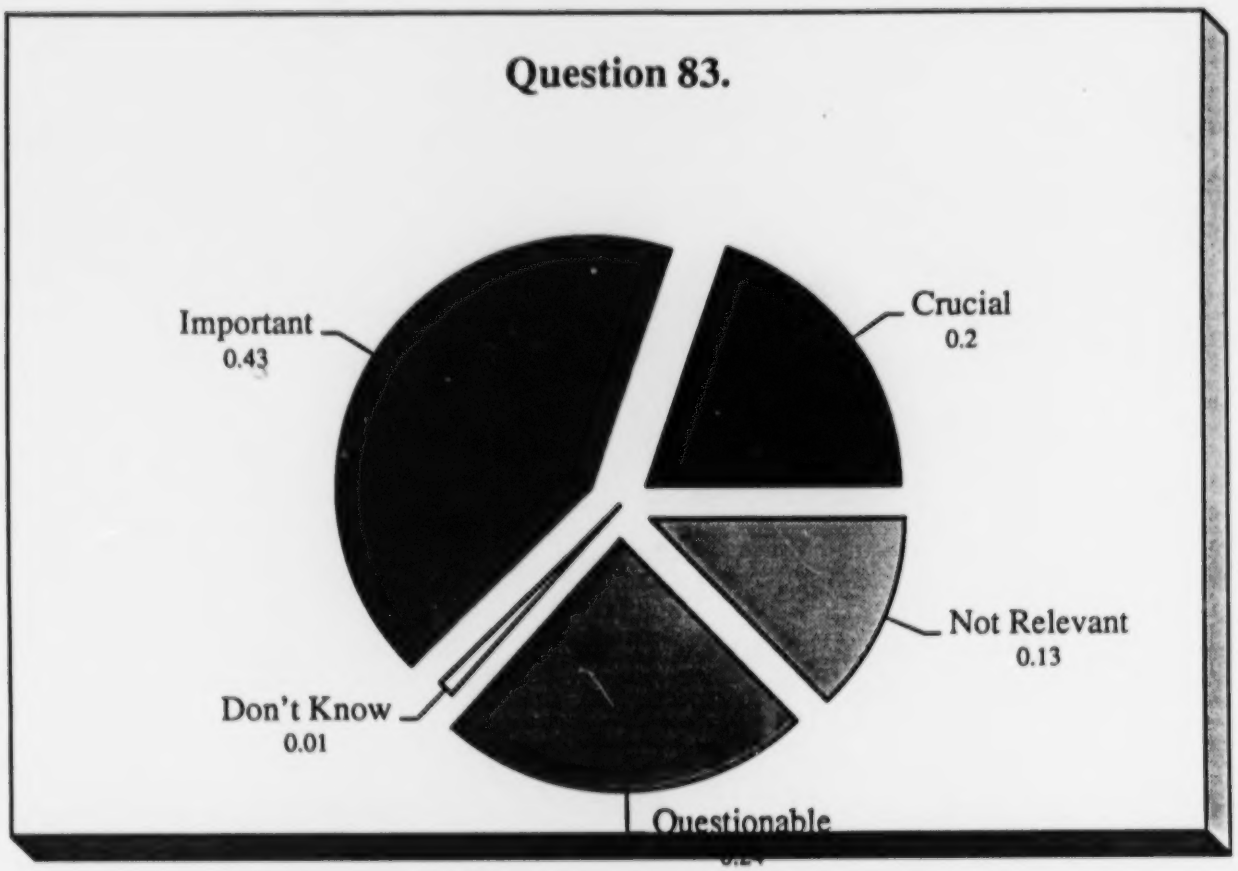
How relevant is knowledge is the area, major resources for development, use, and evaluation of assessment instruments and techniques, to the work you do as a practicing counselor?

Figure 100.



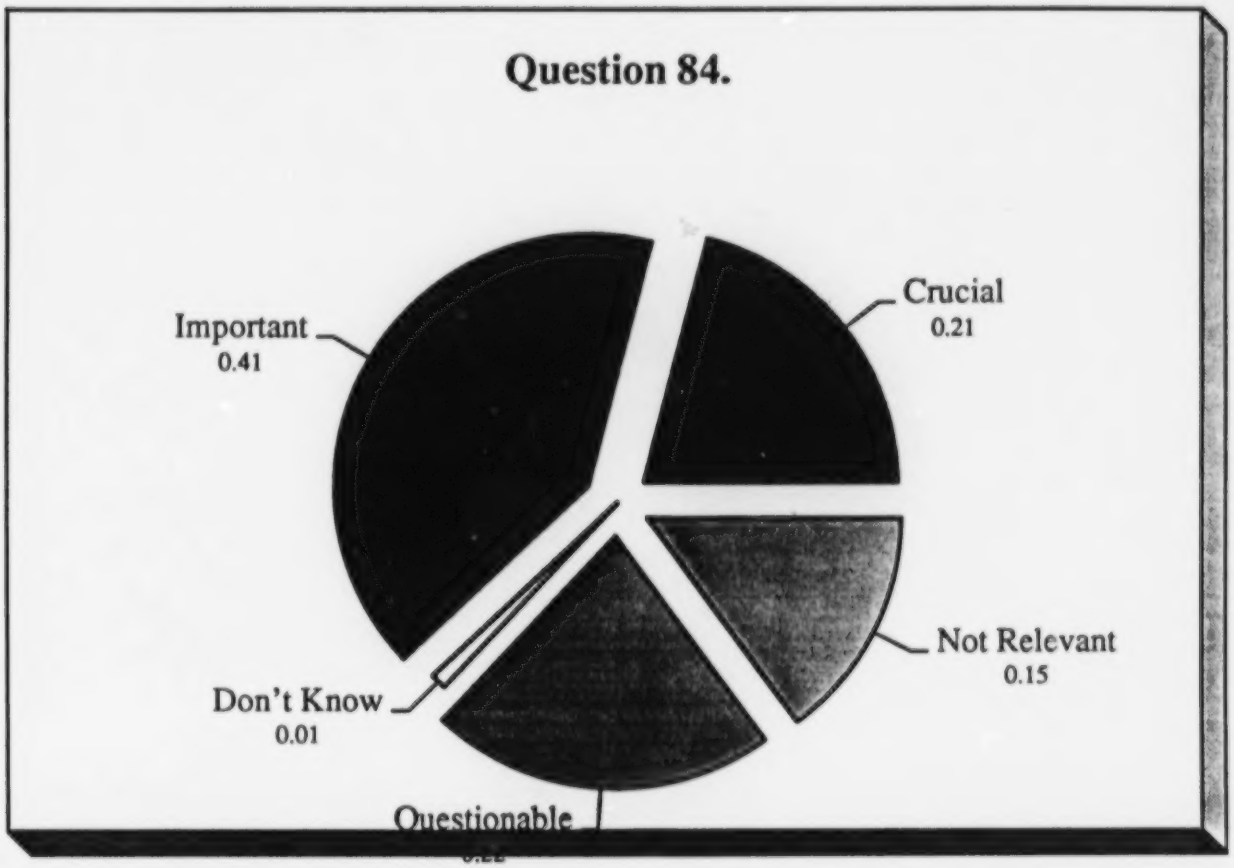
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, intelligence, aptitude, achievement, interest, and personality assessments?

Figure 101.



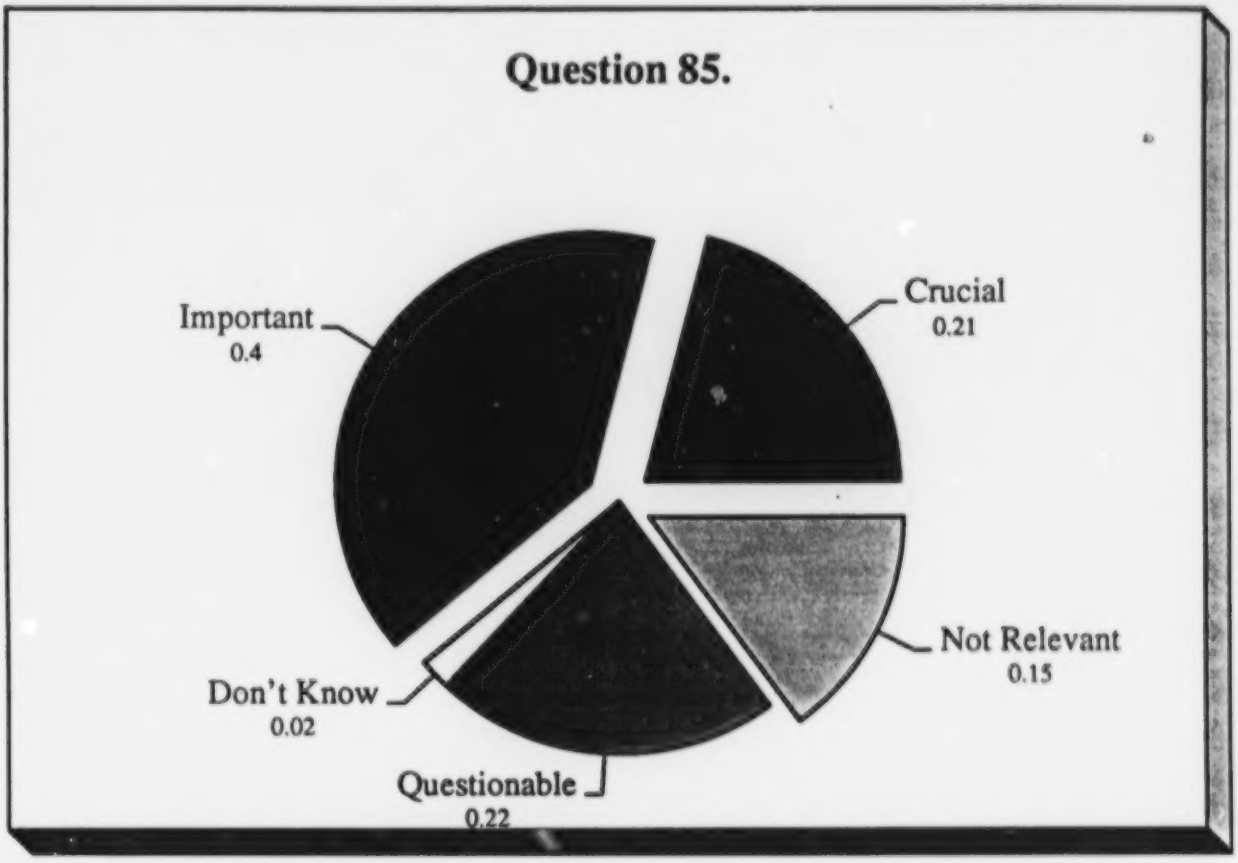
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, selection criteria for various types of assessment methods?

Figure 102.



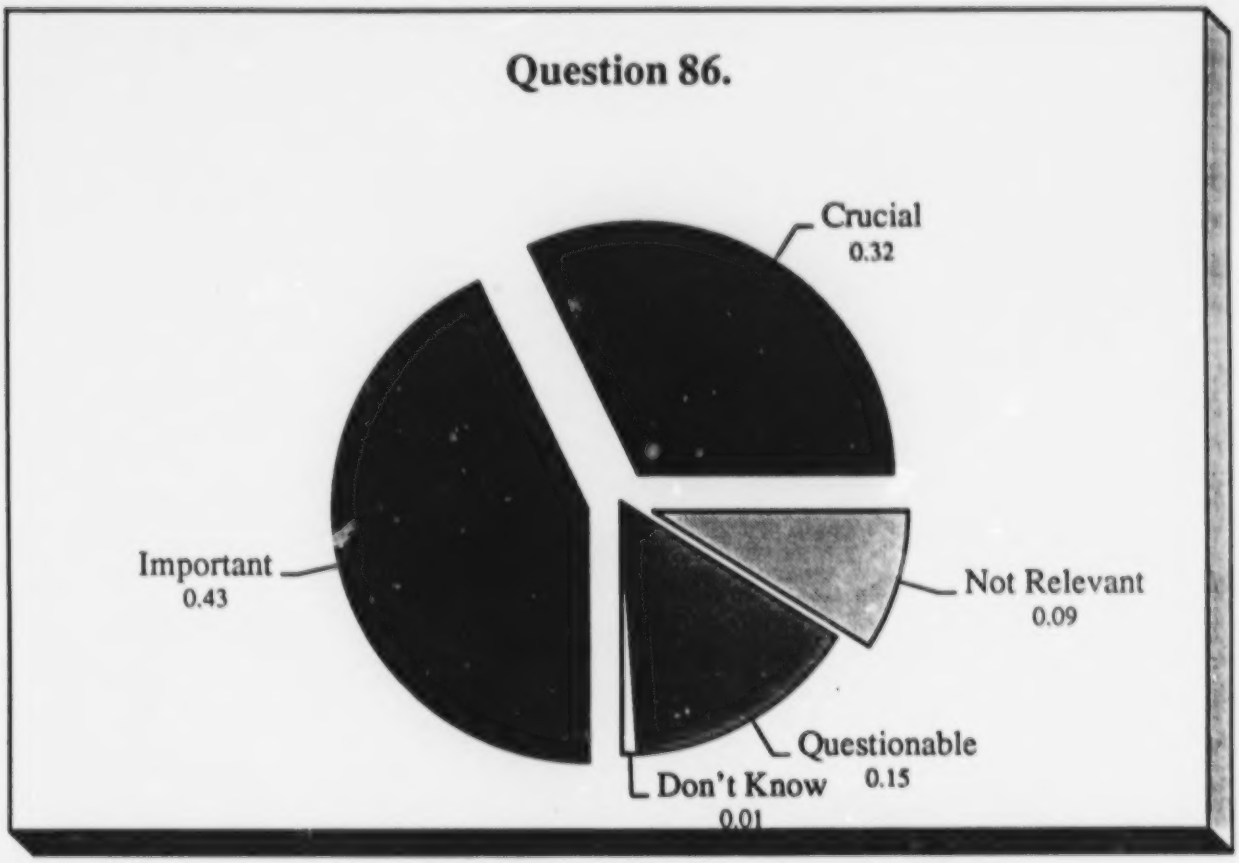
How relevant to the work you do as a practicing counselor is knowledge of the skill: determine the validity of specific assessment methods in specific situations?

Figure 103.



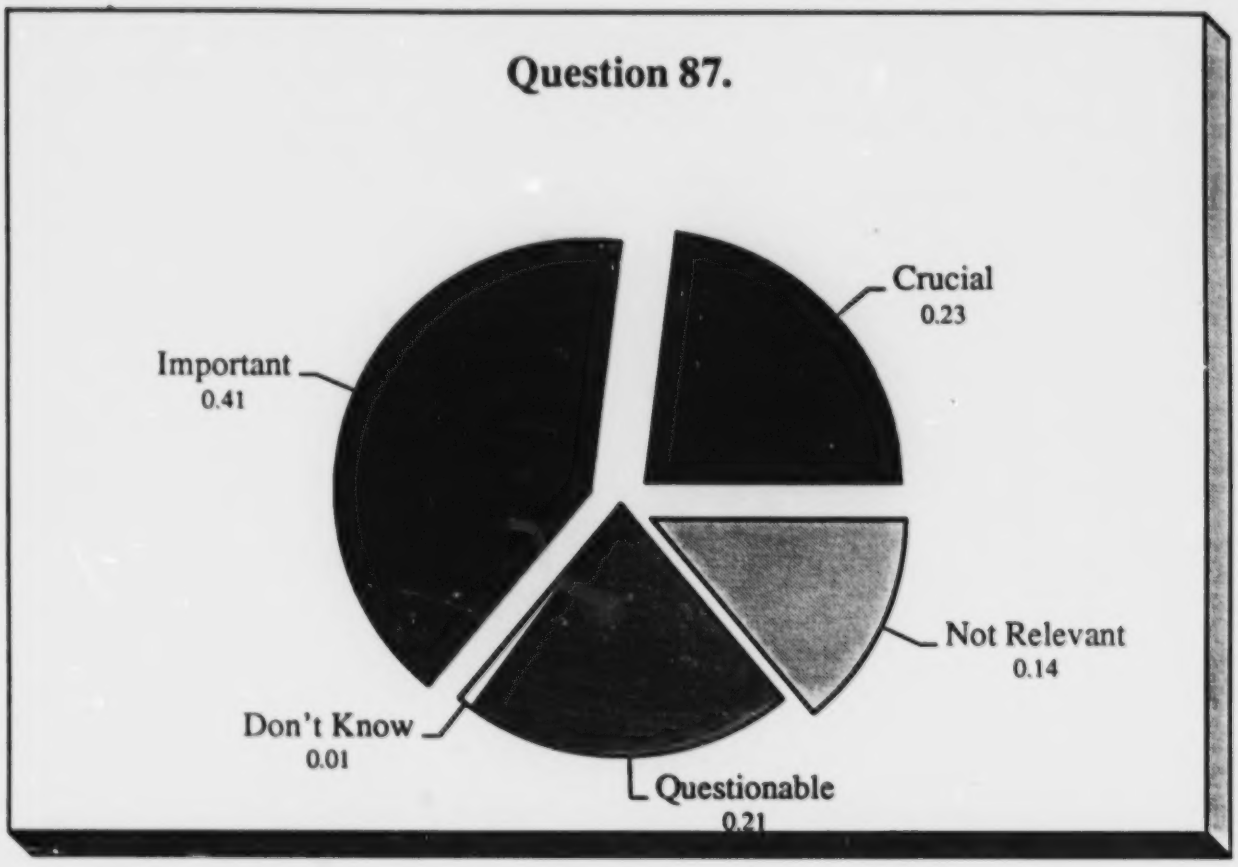
How relevant to the work you do as a practicing counselor is knowledge of the skill: determine the reliability of specific assessment methods in specific situations?

Figure 104.



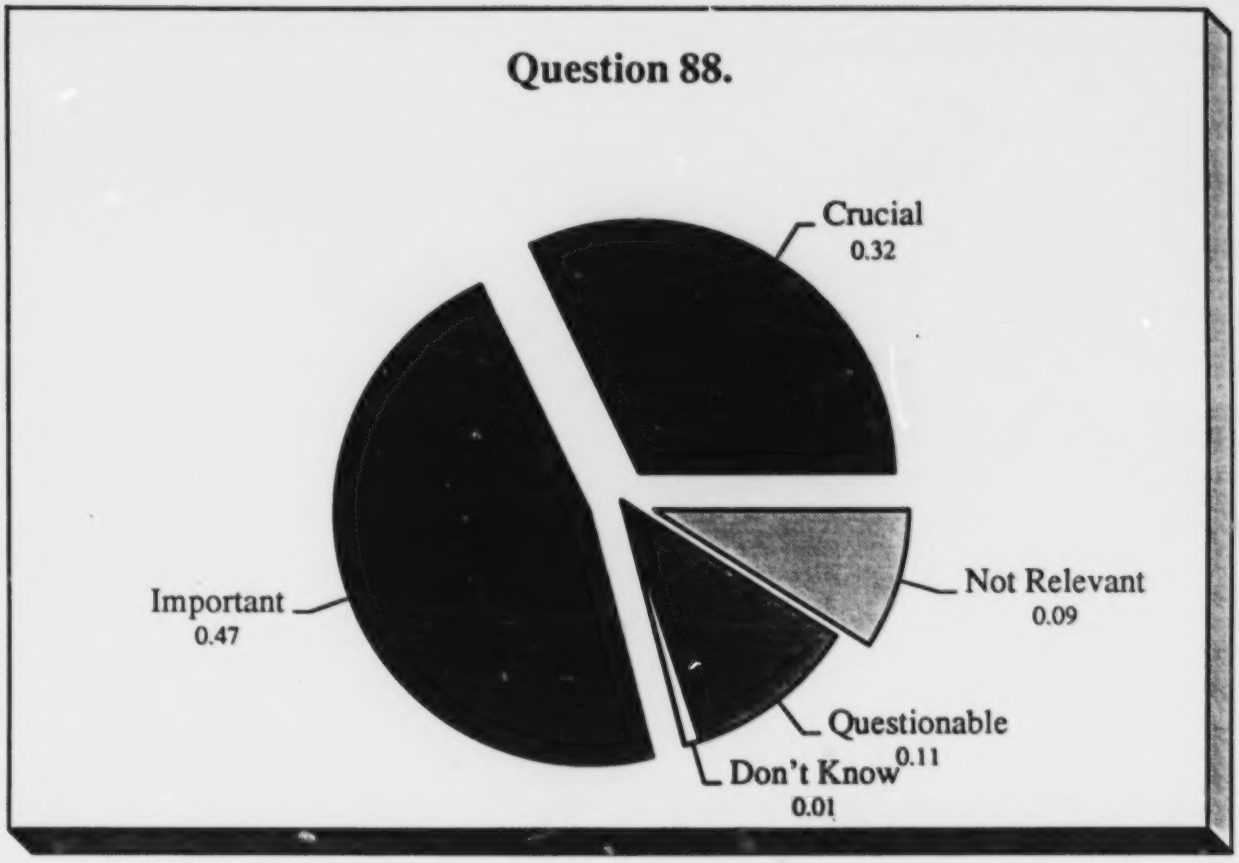
How relevant to the work you do as a practicing counselor is knowledge of the skill: select assessment methods appropriate to practical situations.

Figure 105.



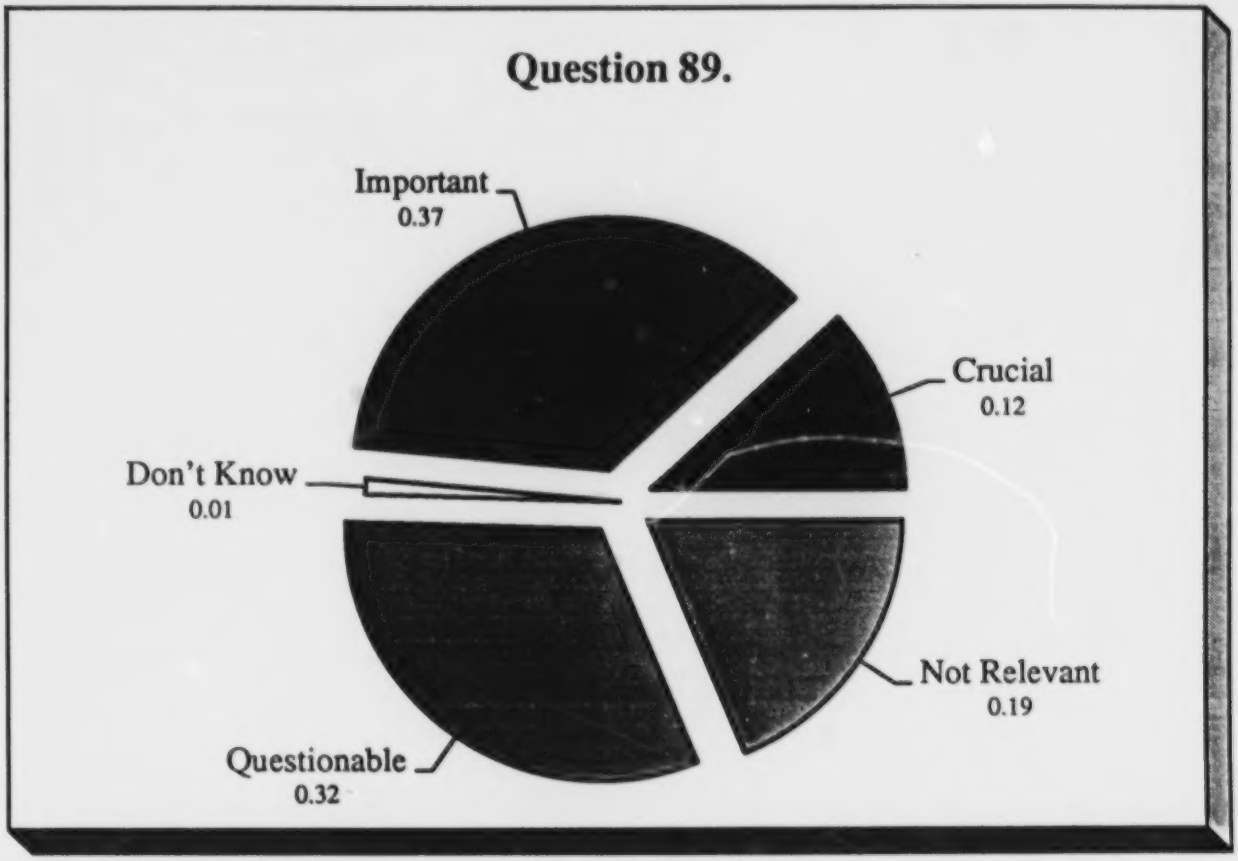
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply and interpret psychometric statistics in practical situations.

Figure 106.



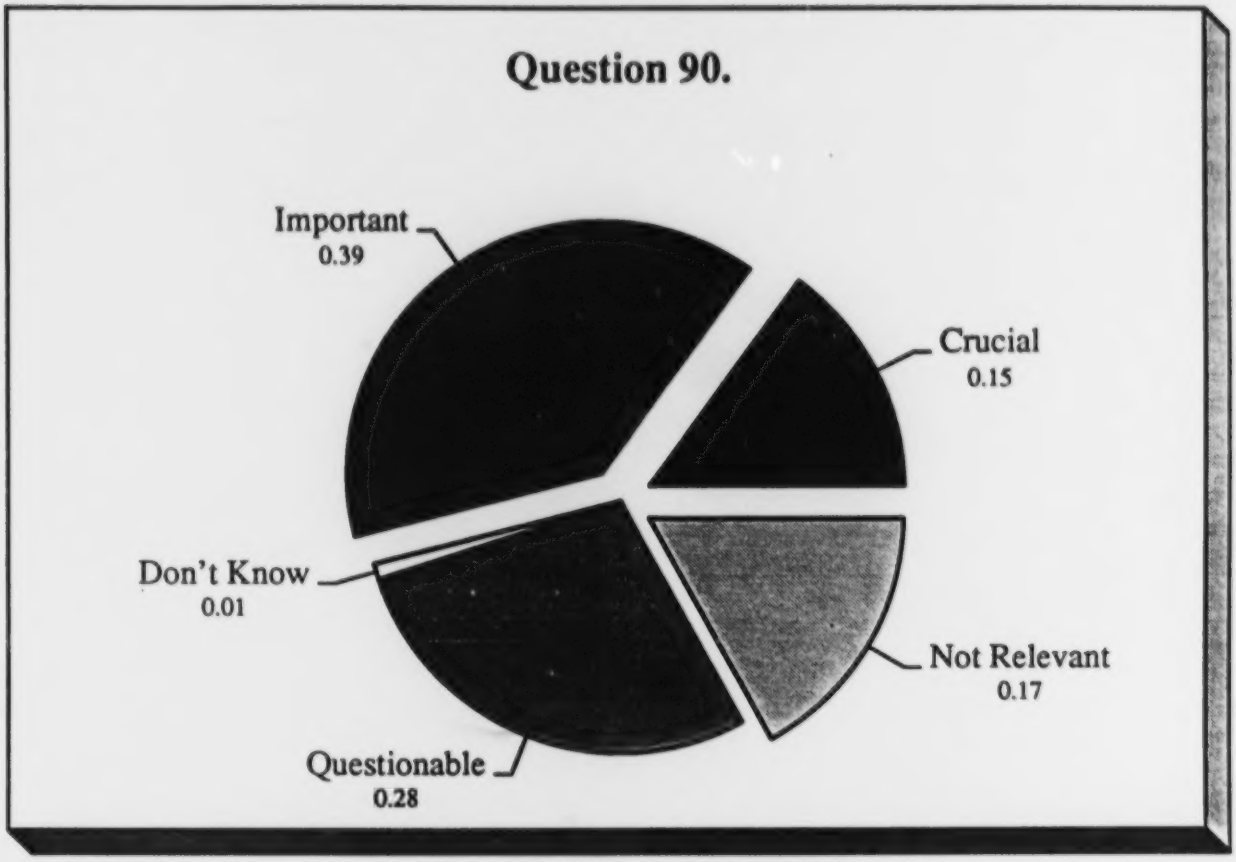
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply assessment interpretations in practical situations?

Figure 107.



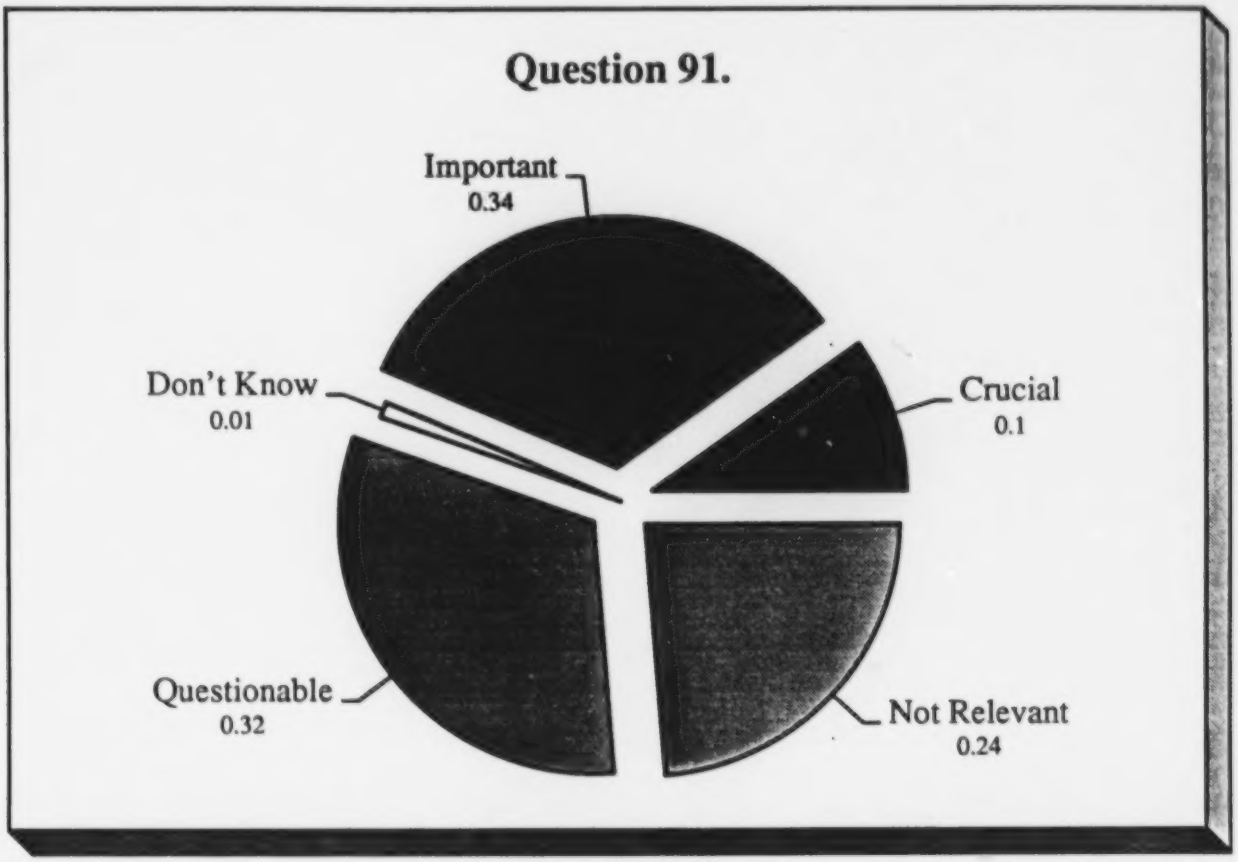
How relevant is knowledge in the area, basic types of research, including historical, descriptive, developmental, case and field studies, correlational, causal-comparative, true experimental and quasi-experimental studies, and action research, to the work you do as a practicing counselor?

Figure 108.



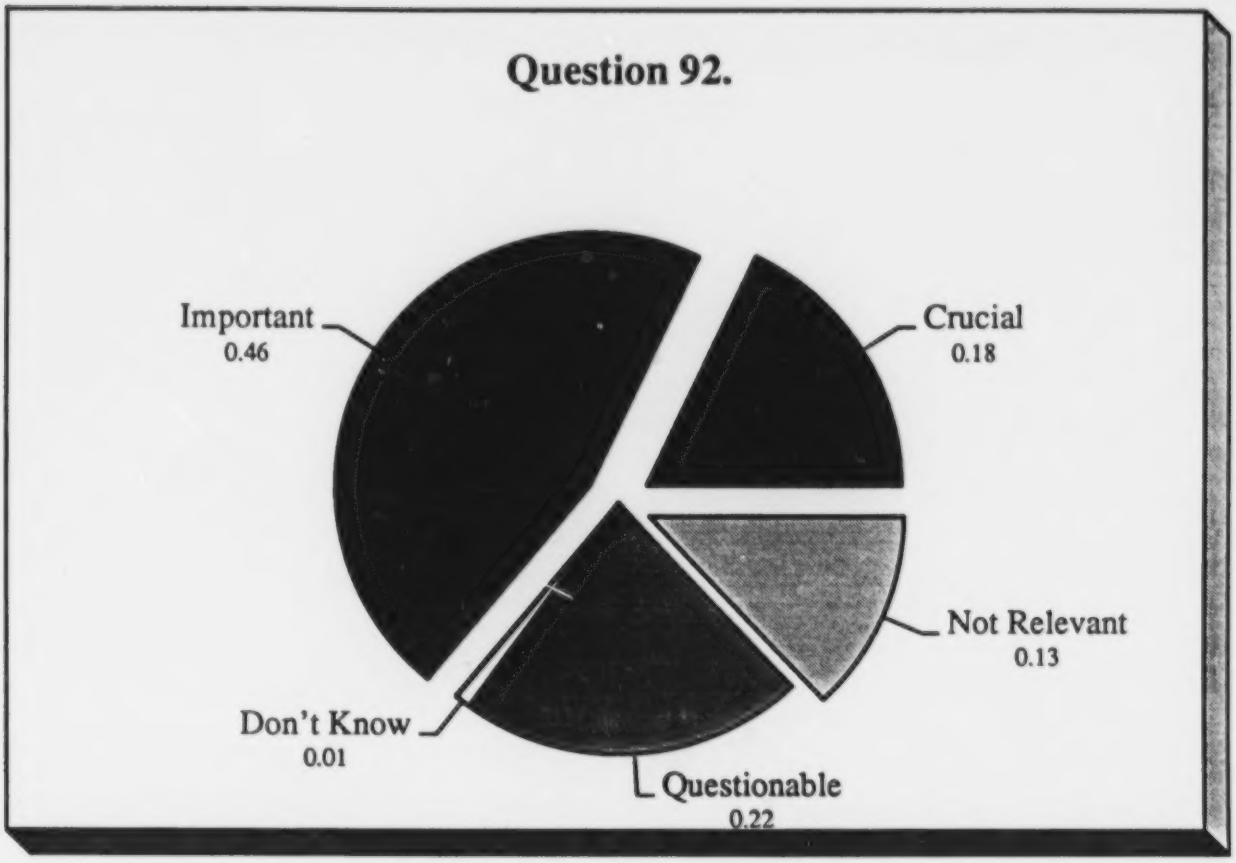
How relevant is knowledge in the area, basic statistics, including types of data, distributional statistics, indices of variability, standard errors, relational statistics (e.g., simple, partial, and multiple correlation), comparison statistics (e.g., t-test, analysis of variance), and basic nonparametric statistics (e.g., chi-square) , to the work you do as a practicing counselor?

Figure 109.



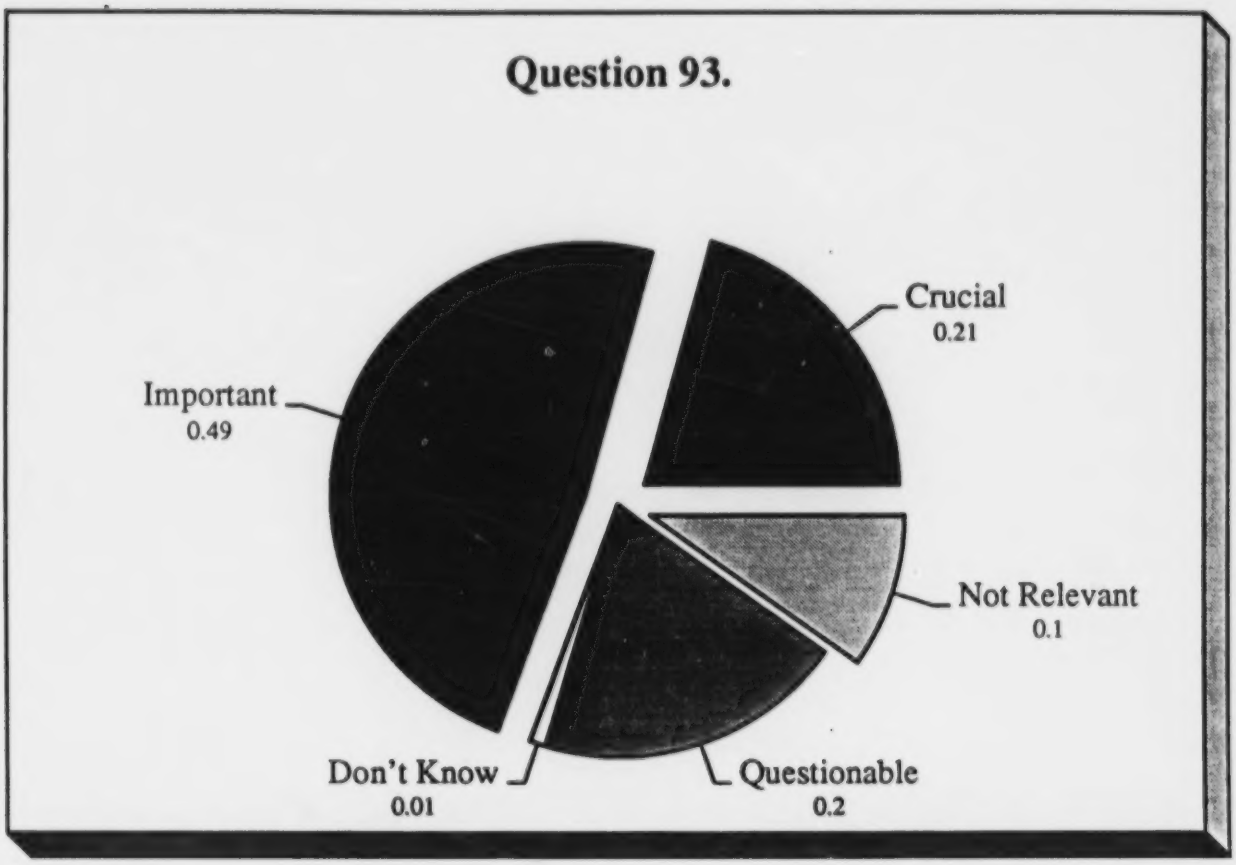
How relevant is knowledge in the area, principles of research proposal and report development, including report models, resources and guidelines, to the work you do as a practicing counselor?

Figure 110.



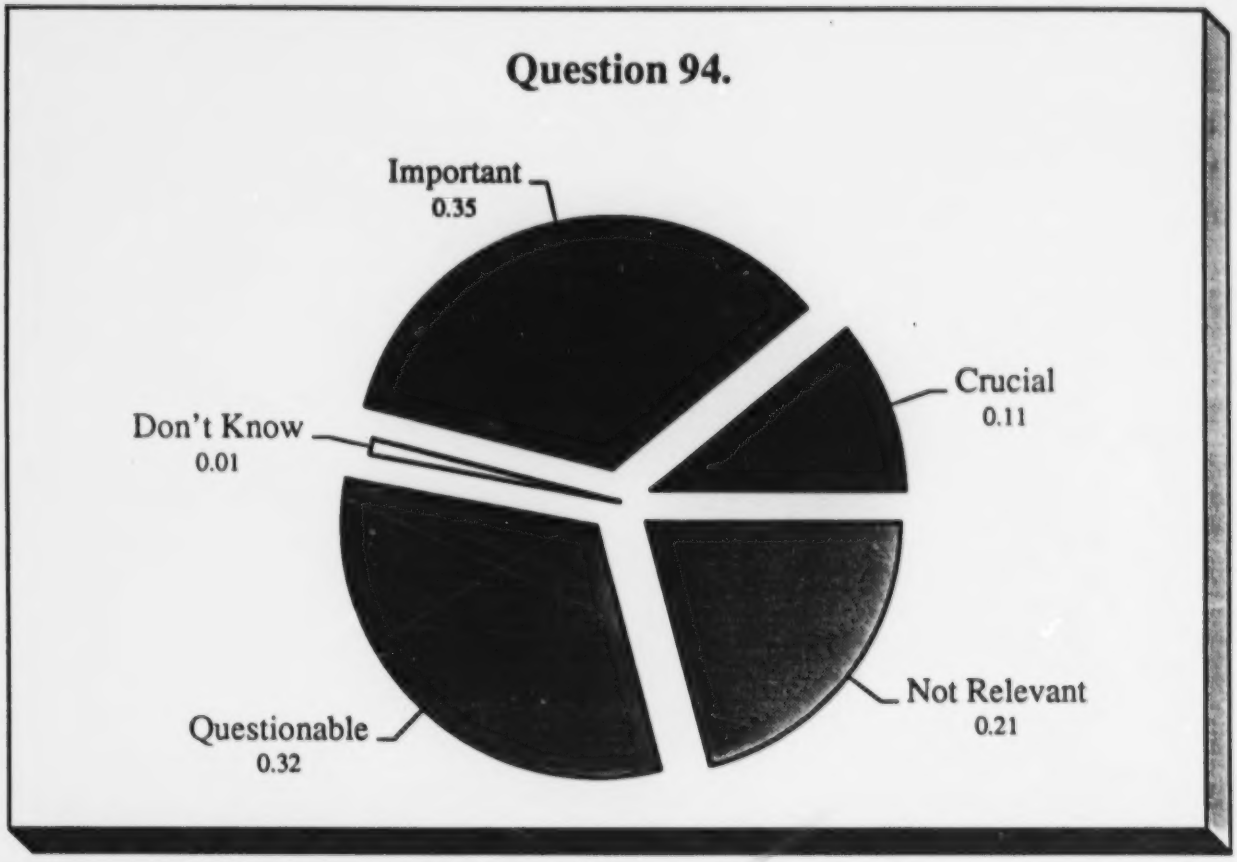
How relevant is knowledge in the area, principles of program evaluation, including development of objectives, assessment methods, and summative and formative approaches, to the work you do as a practicing counselor?

Figure 111.



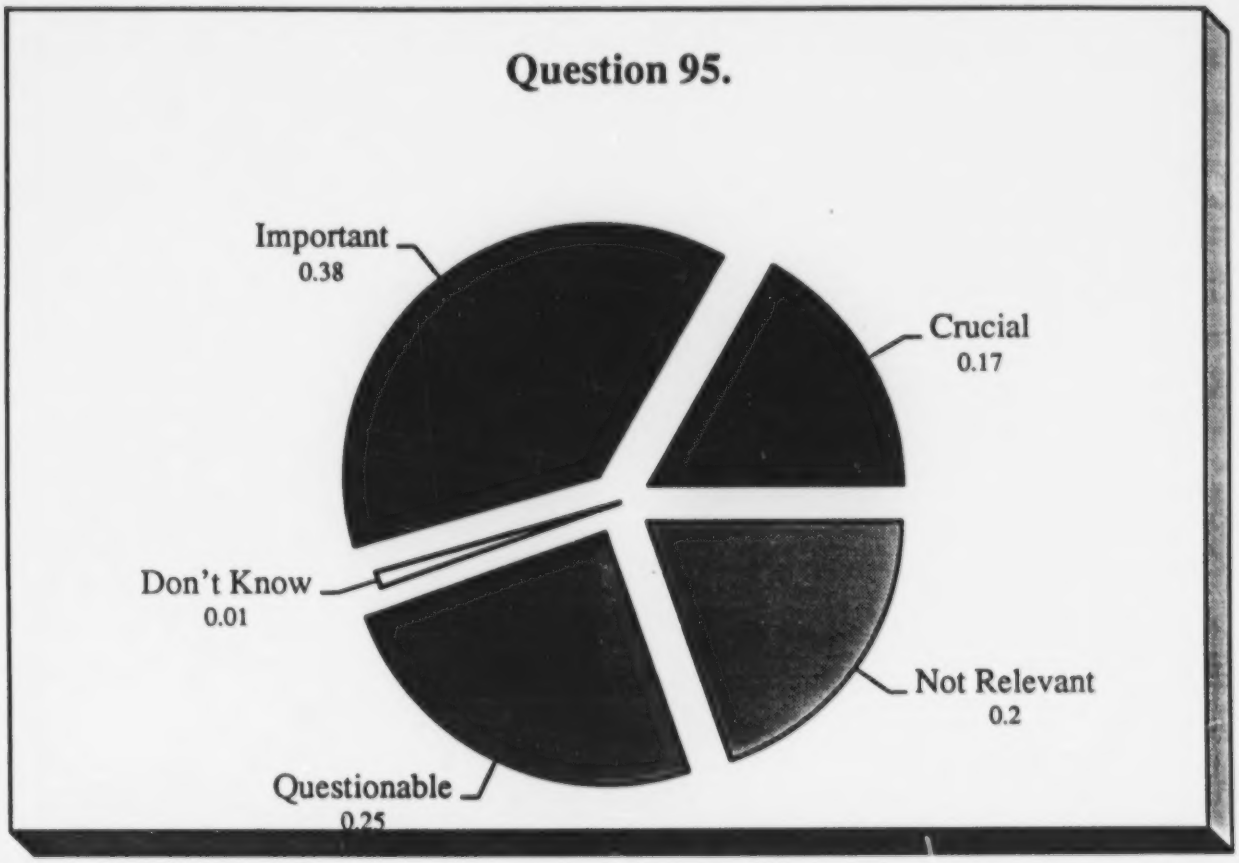
How relevant is knowledge in the area, principles of needs-assessment methods, to the work you do as a practicing counselor?

Figure 112.



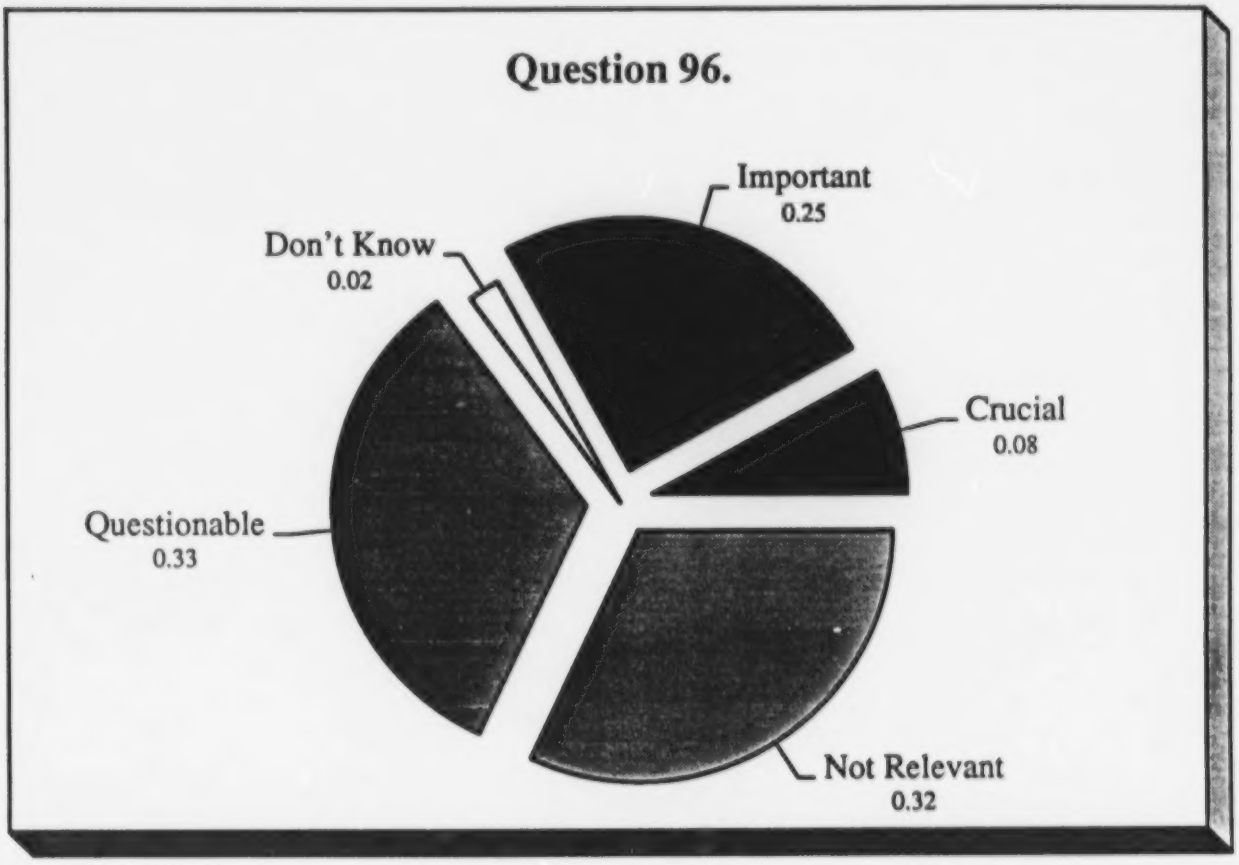
How relevant is knowledge in the area, practices in professional publication, including guidelines, sources of assistance, and ethical considerations to the work you do as a practicing counselor?

Figure 113.



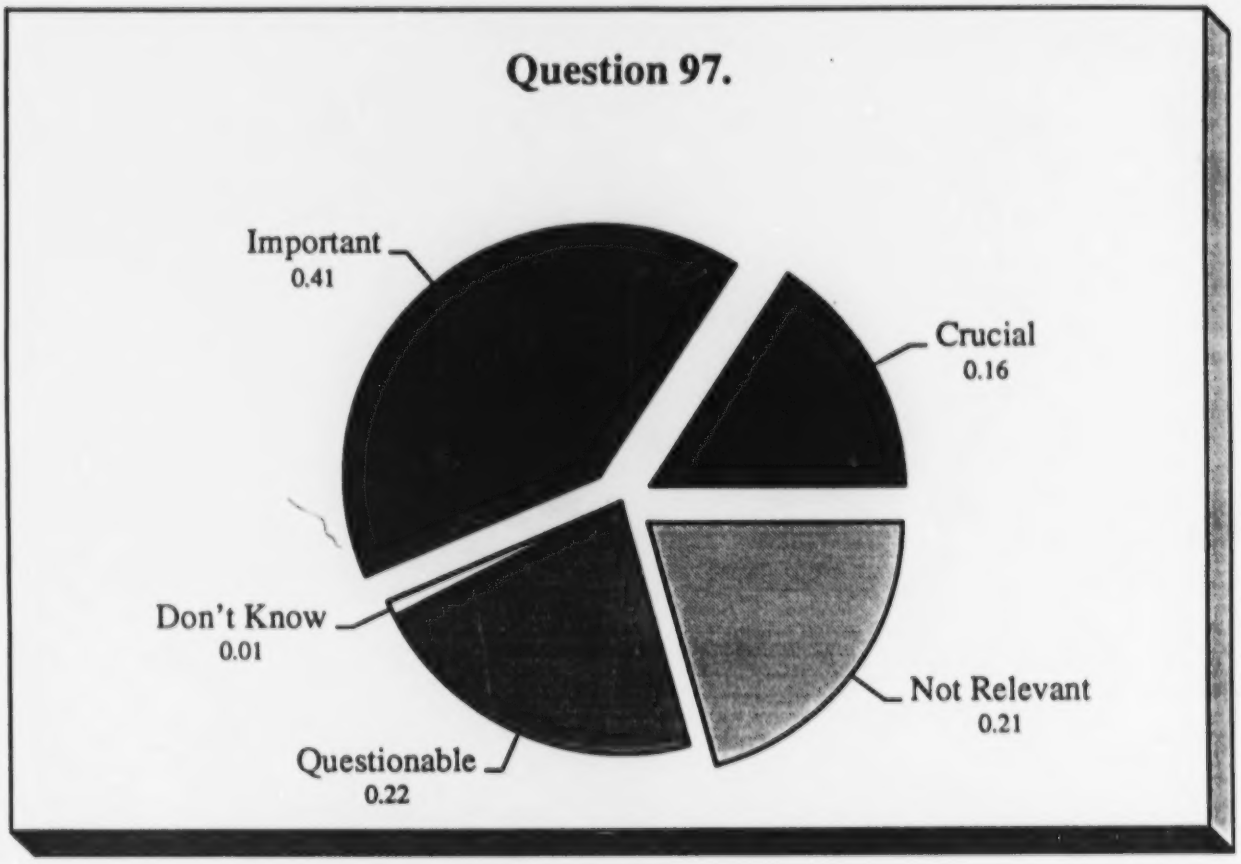
How relevant is knowledge in the area, ethical and legal considerations in research, to the work you do as a practicing counselor?

Figure 114.



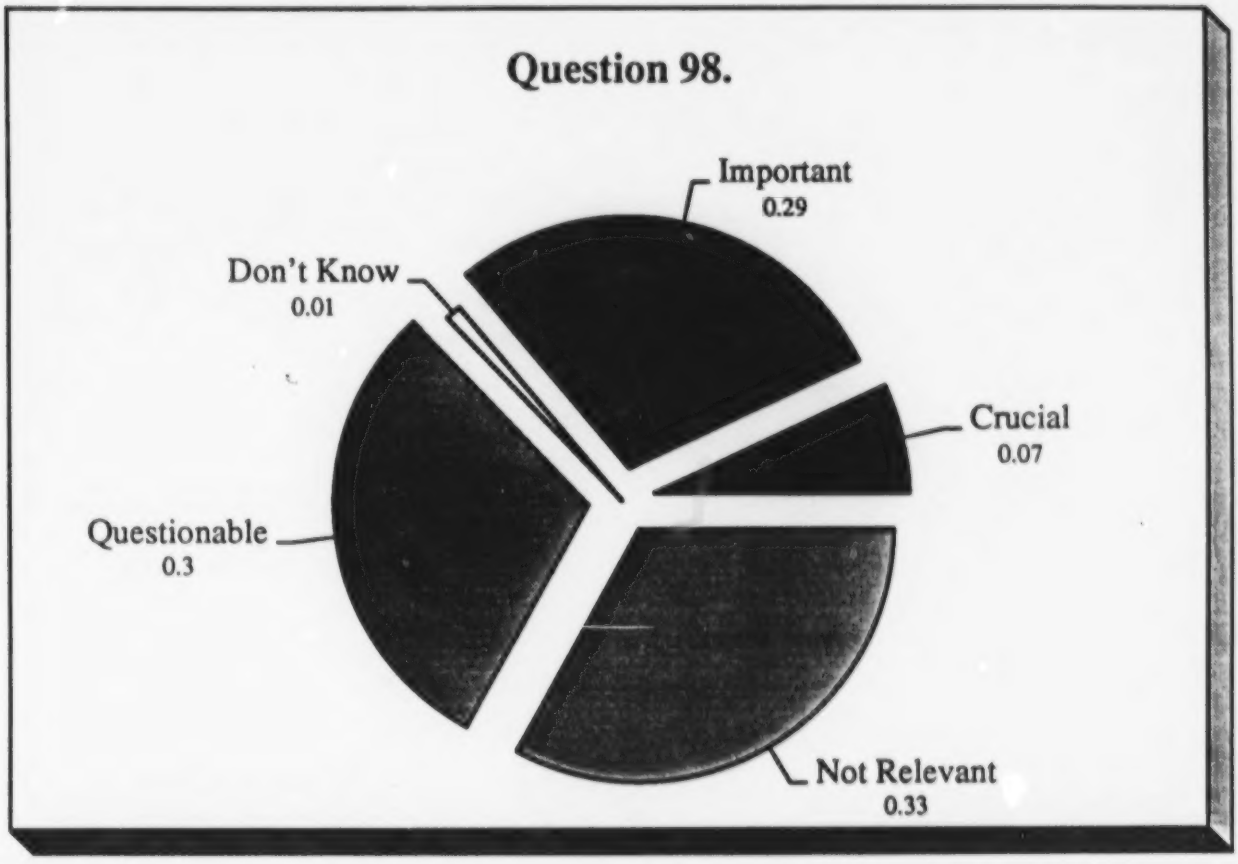
How relevant to the work you do as a practicing counselor is knowledge of the skills: explain, in operational terms, research types and approaches?

Figure 115.



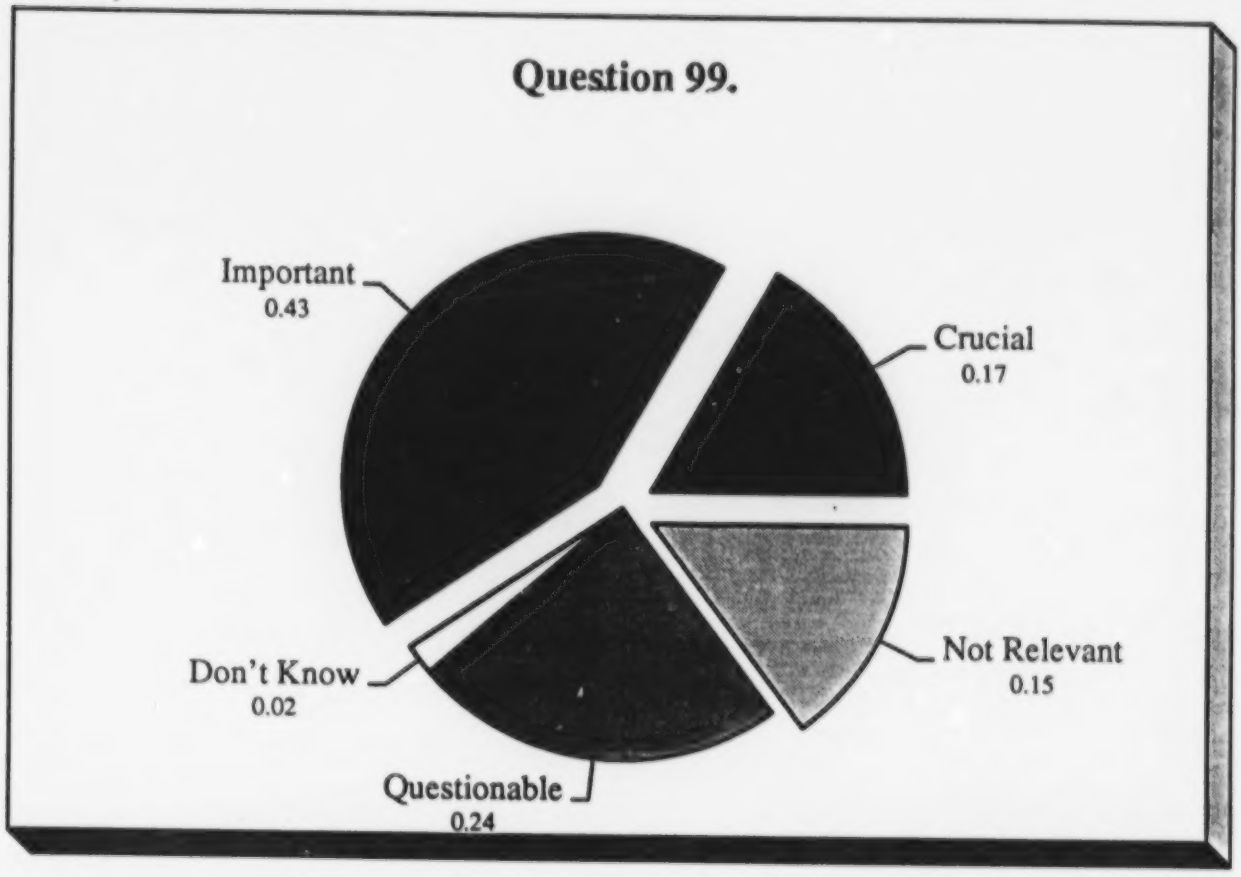
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply basic statistics in practical situations?

Figure 116.



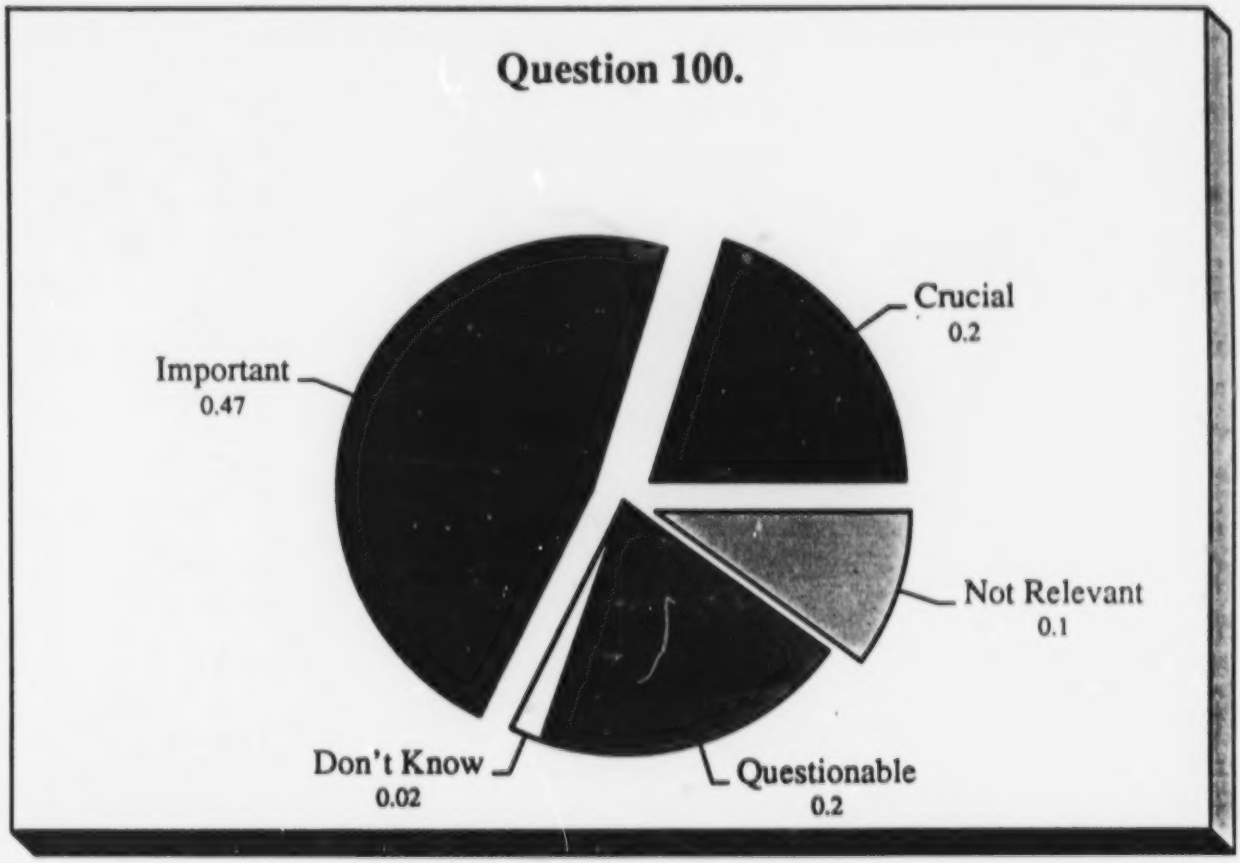
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply principles of research proposal development?

Figure 117.



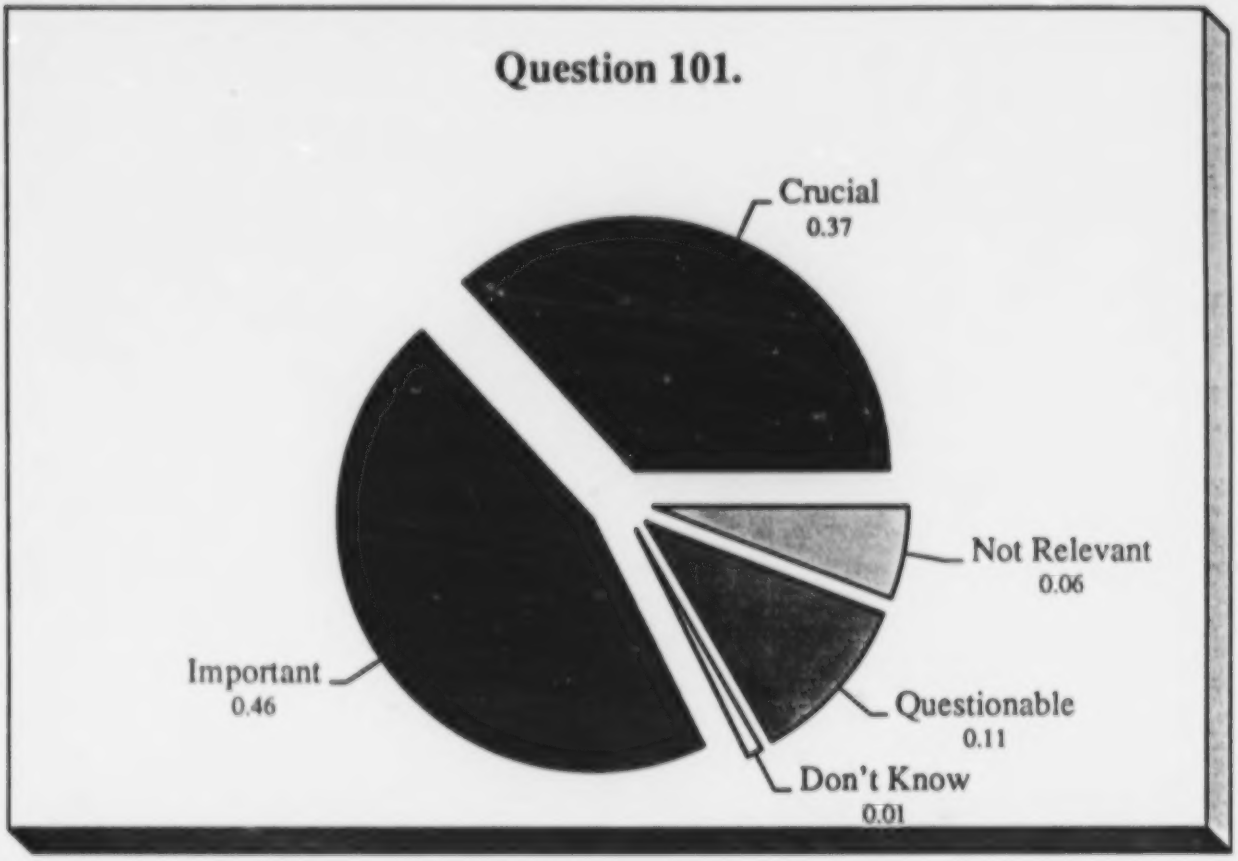
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply principles of program evaluation in practical situations?

Figure 118.



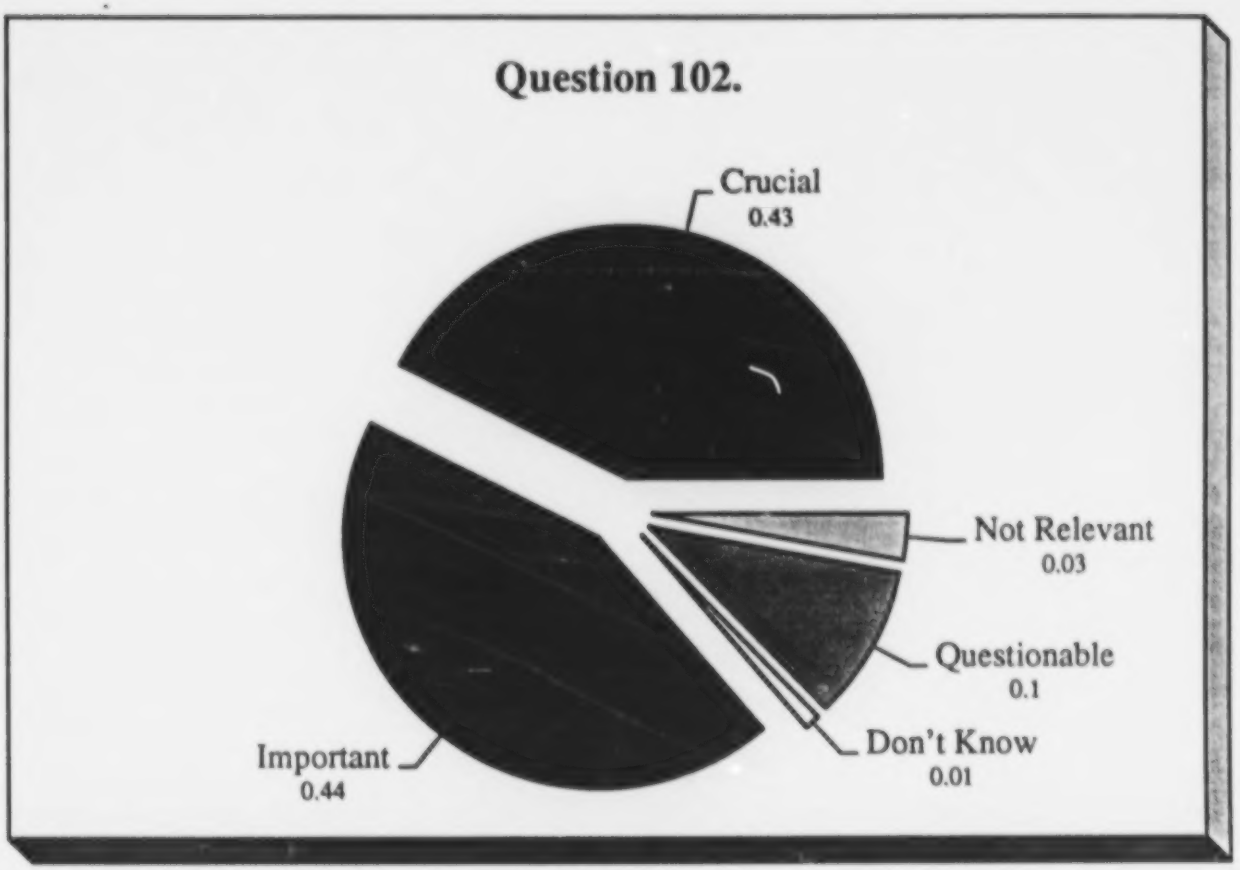
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply principles of program evaluation in practical situations?

Figure 119.



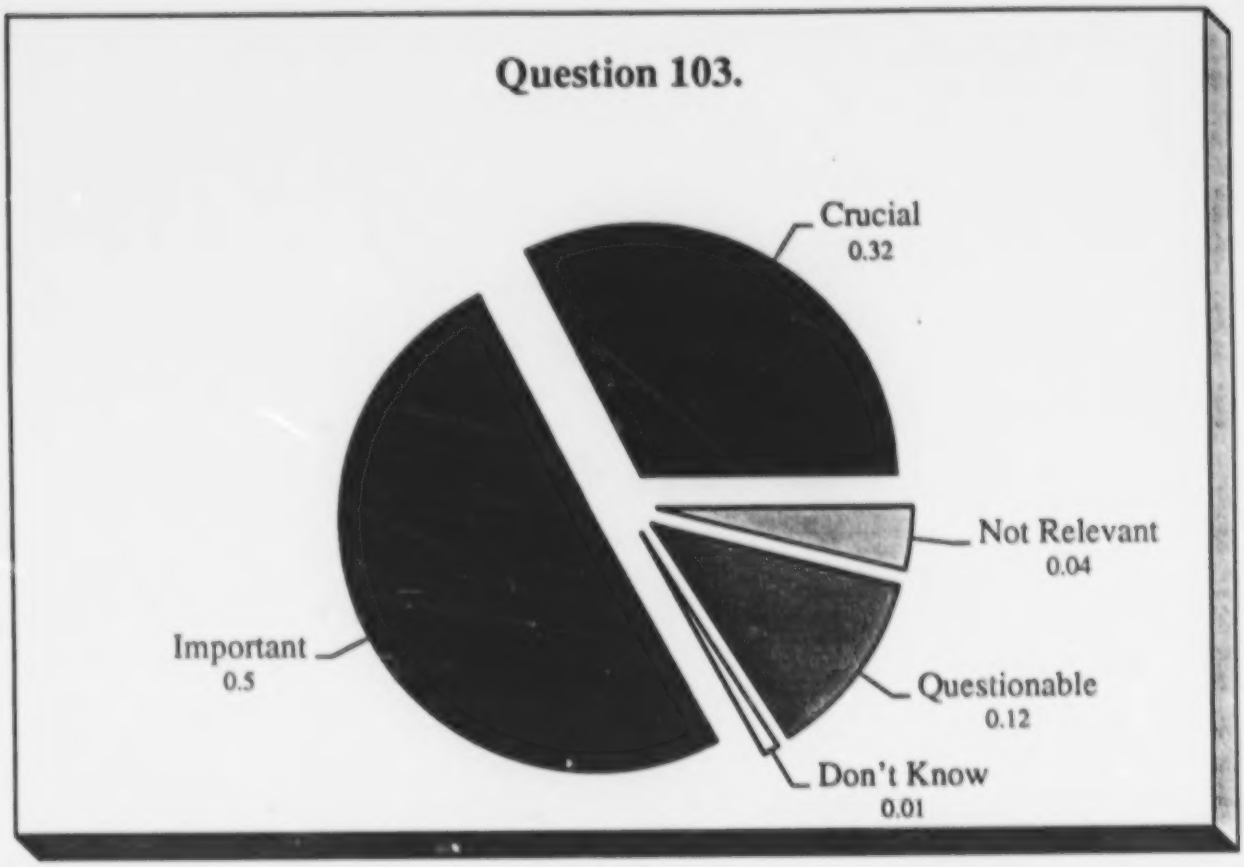
How relevant to the work you do as a practicing counselor is knowledge of the skills: apply ethical and legal considerations in practical situations?

Figure 120.



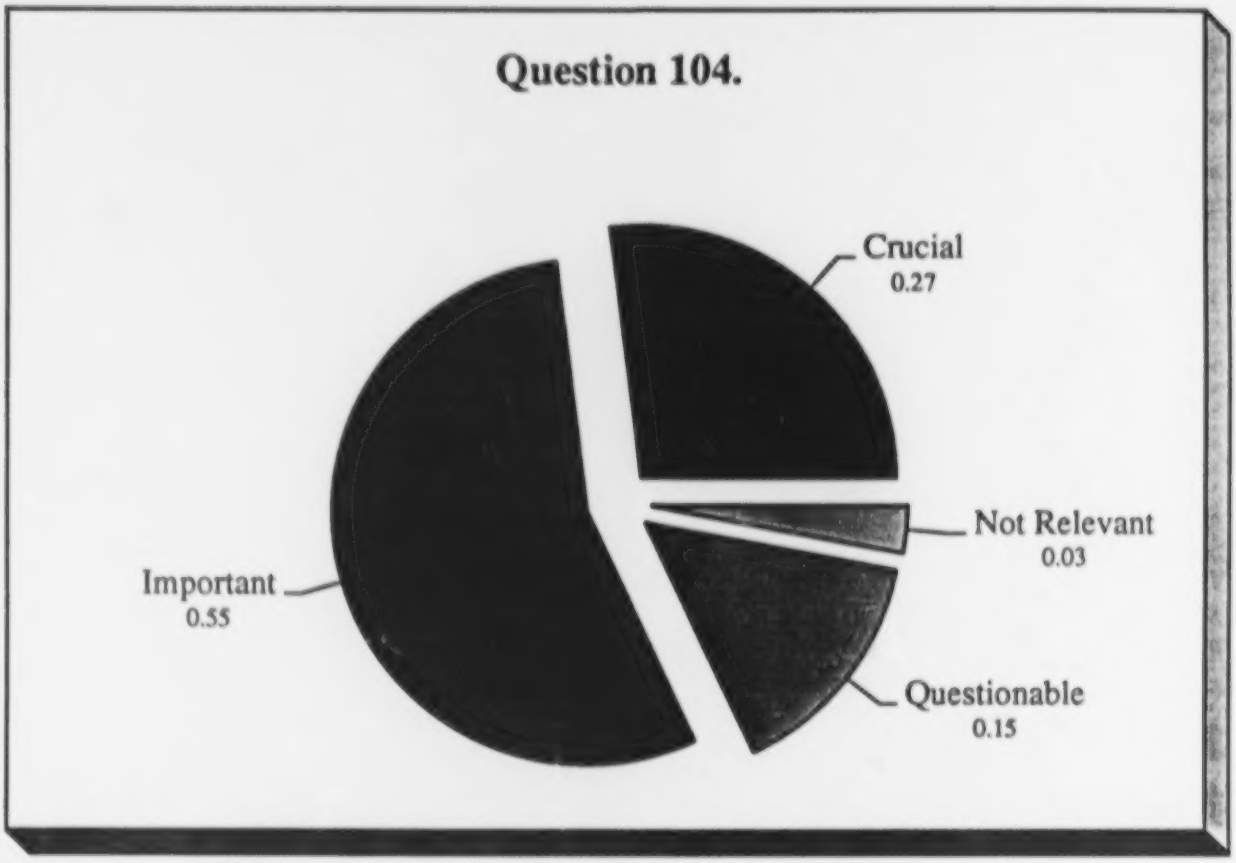
How relevant is knowledge in the area, ethical standards, including their development, methods of changing standards and applications to various professional activities, to the work you do as a practicing counselor?

Figure 121.



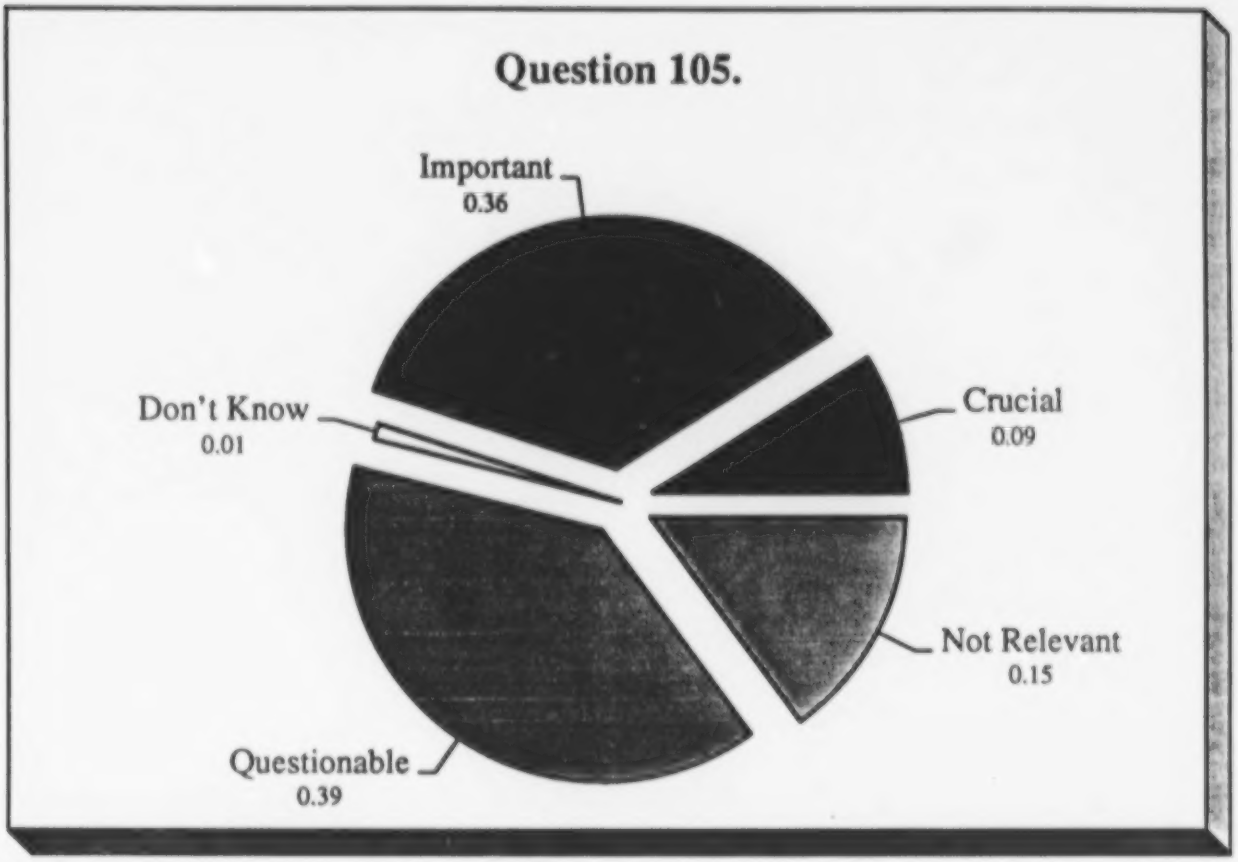
How relevant is knowledge in the area, professional roles and functions, including similarities to and differences with other types of professionals, to the work you do as a practicing counselor?

Figure 122.



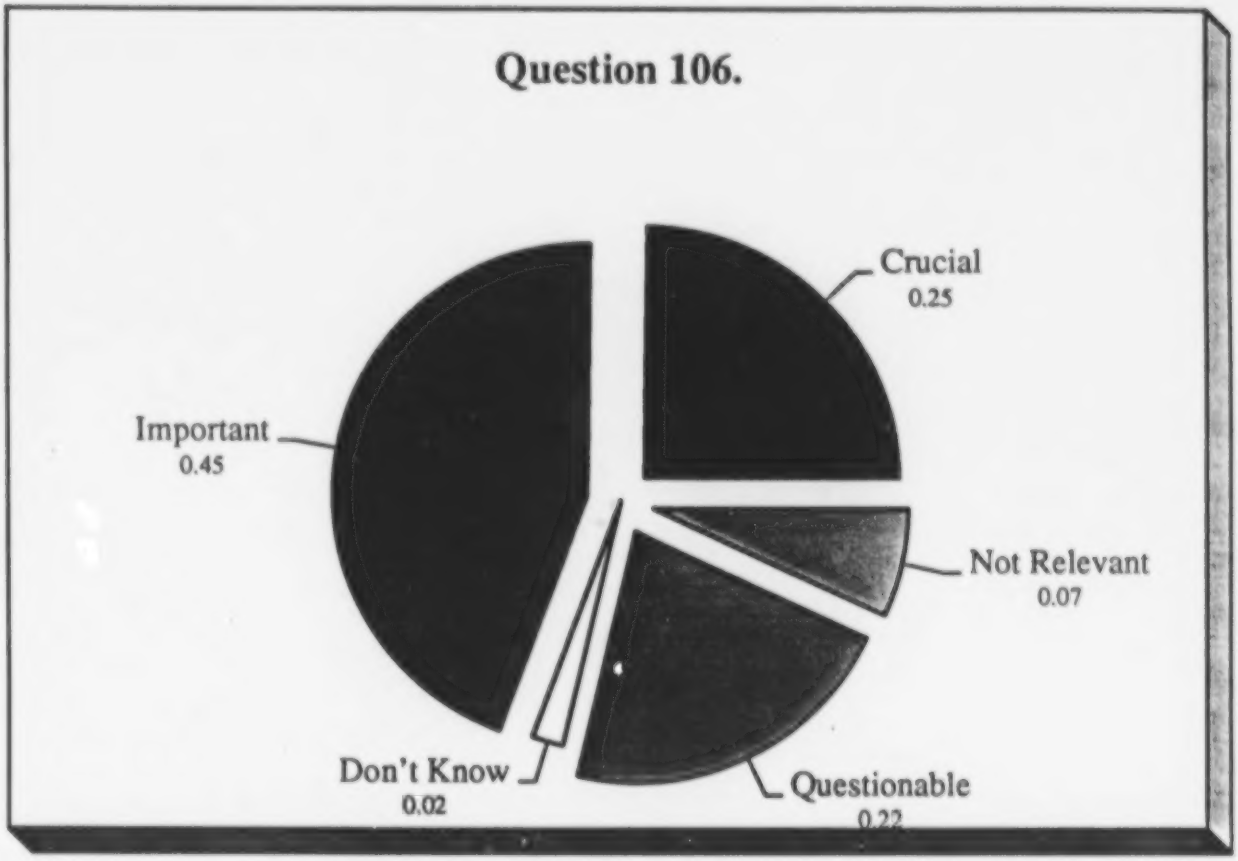
How relevant is knowledge in the area, professional organizations, including membership benefits, activities, services to members, and current emphases, to the work you do as a practicing counselor?

Figure 123.



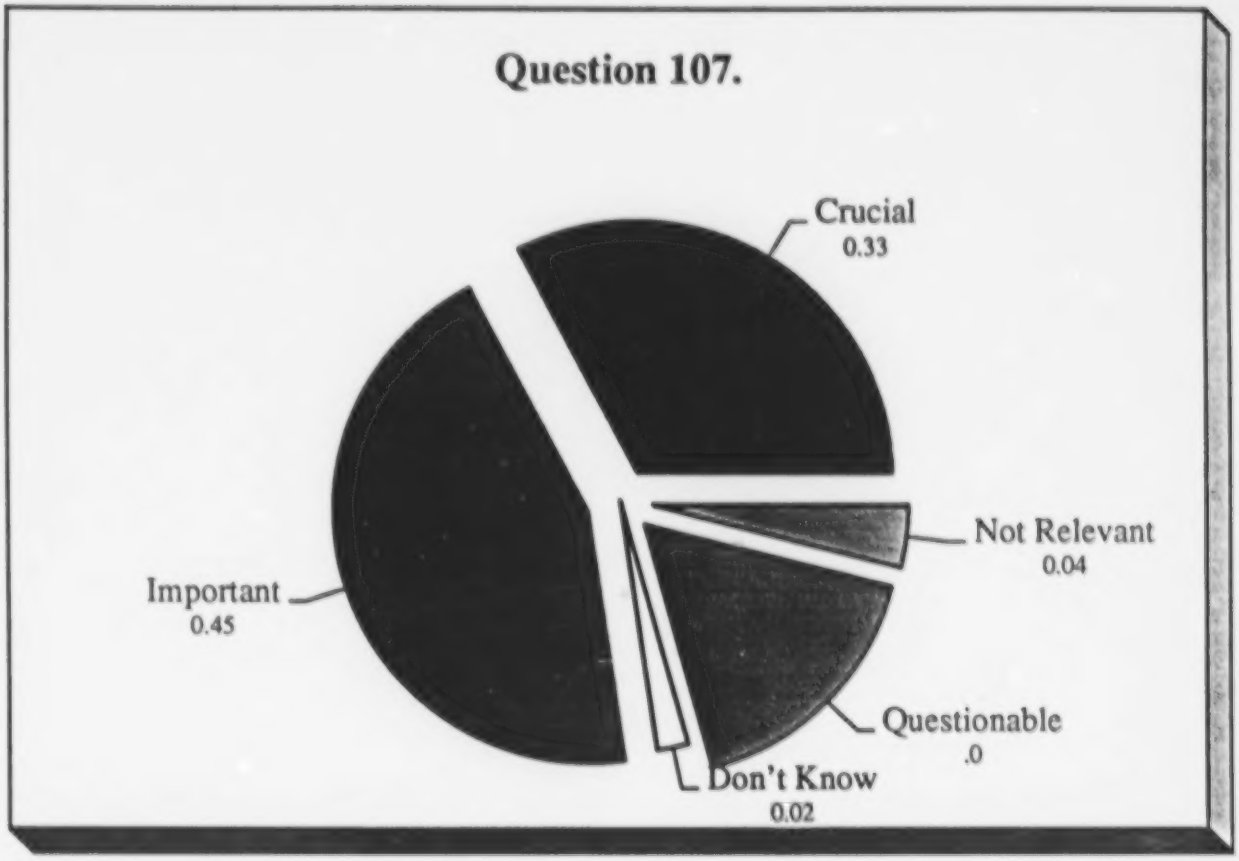
How relevant is knowledge in the area, history of the helping professions, including significant factors and events influencing the evolution of the helping professions, to the work you do as a practicing counselor?

Figure 124.



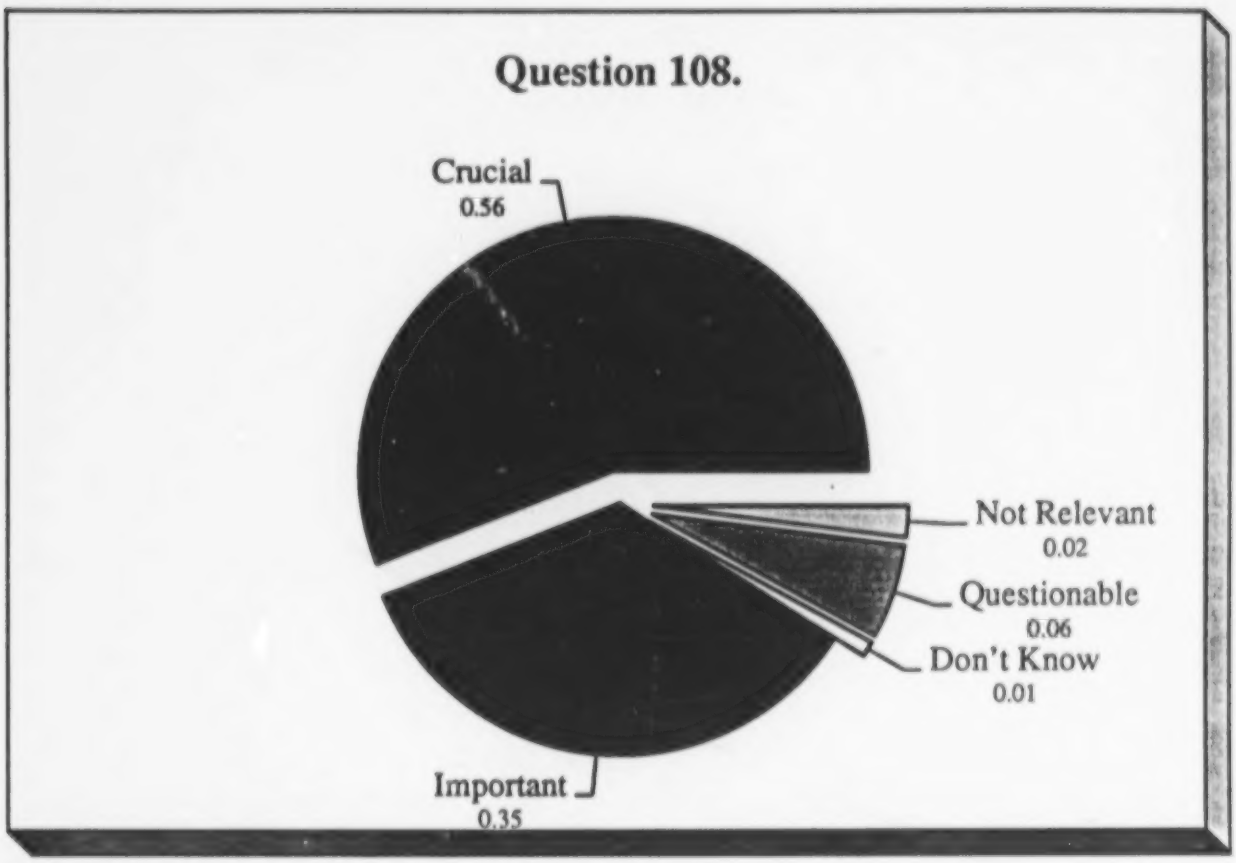
How relevant is knowledge in the area, professional preparation standards, including their development and current applications, to the work you do as a practicing counselor?

Figure 125.



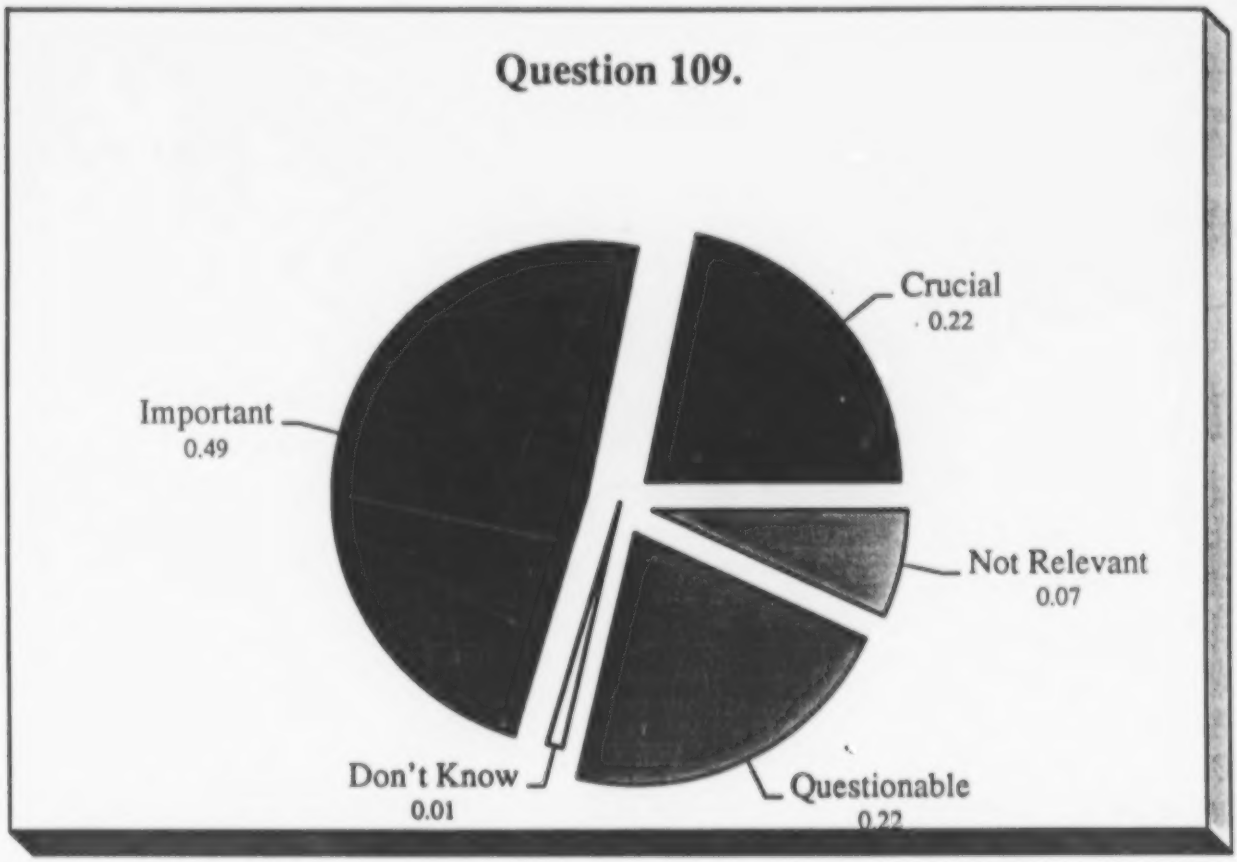
How relevant is knowledge in the area, professional credentialing, including certification, licensure, and accreditation practices, standards, and activities to the work you do as a practicing counselor?

Figure 126.



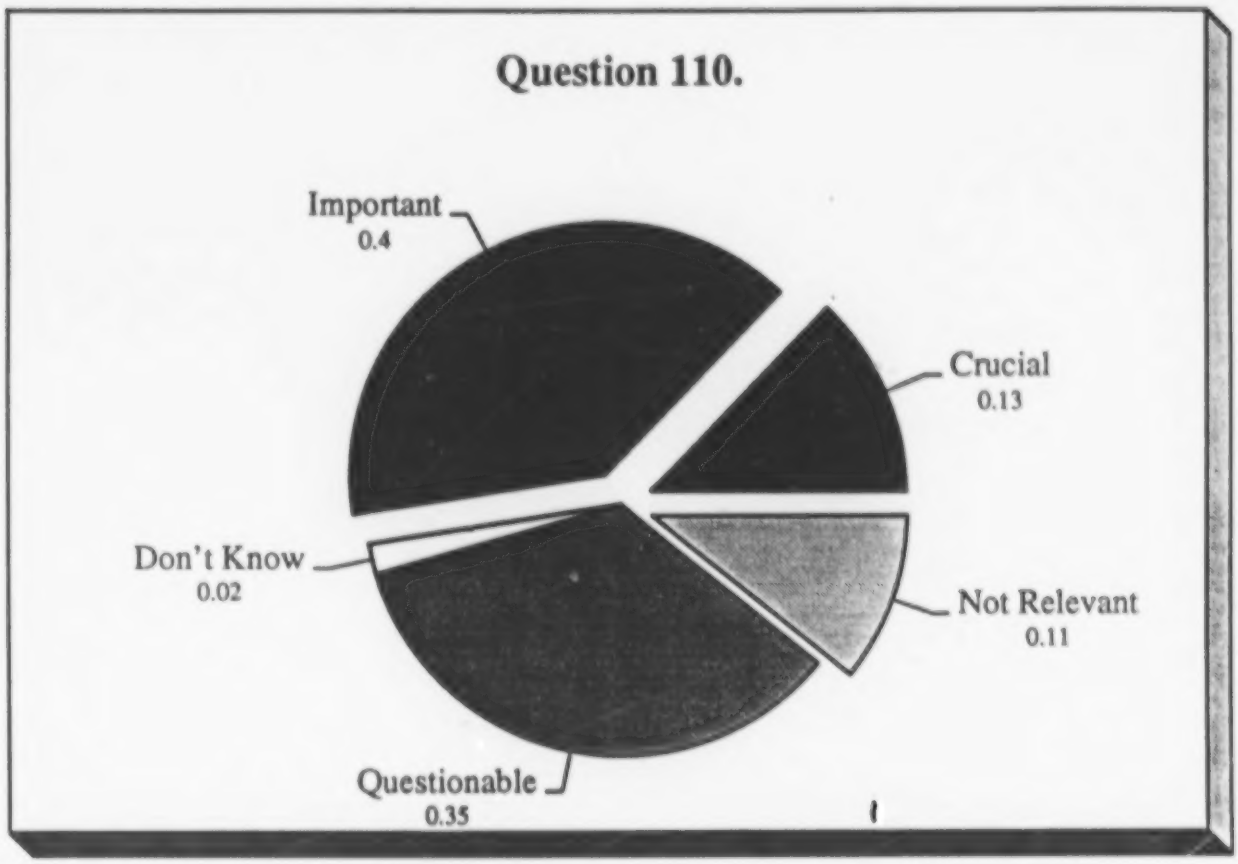
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply professional ethical standards in practical situations?

Figure 127.



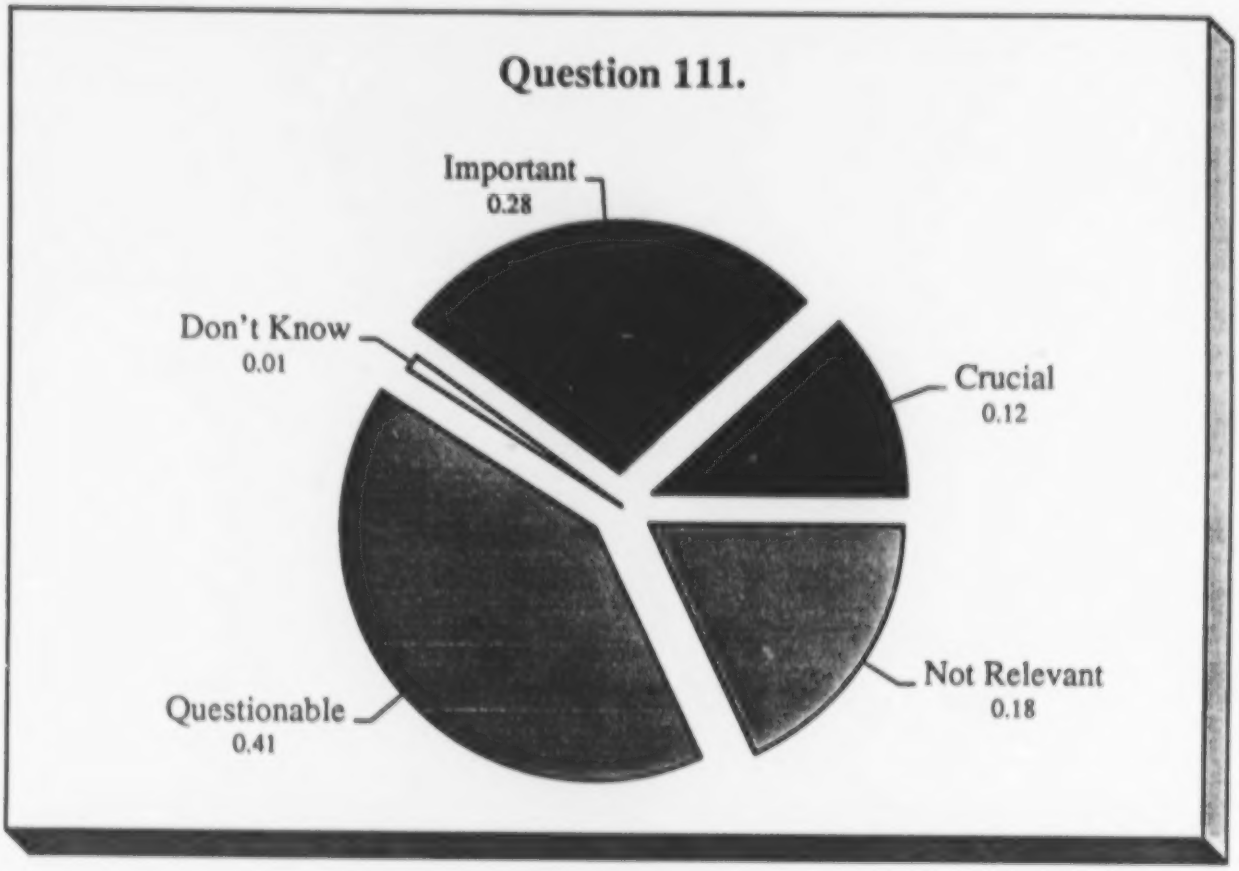
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, varying professional roles and functions, and their professional interrelationships?

Figure 128.



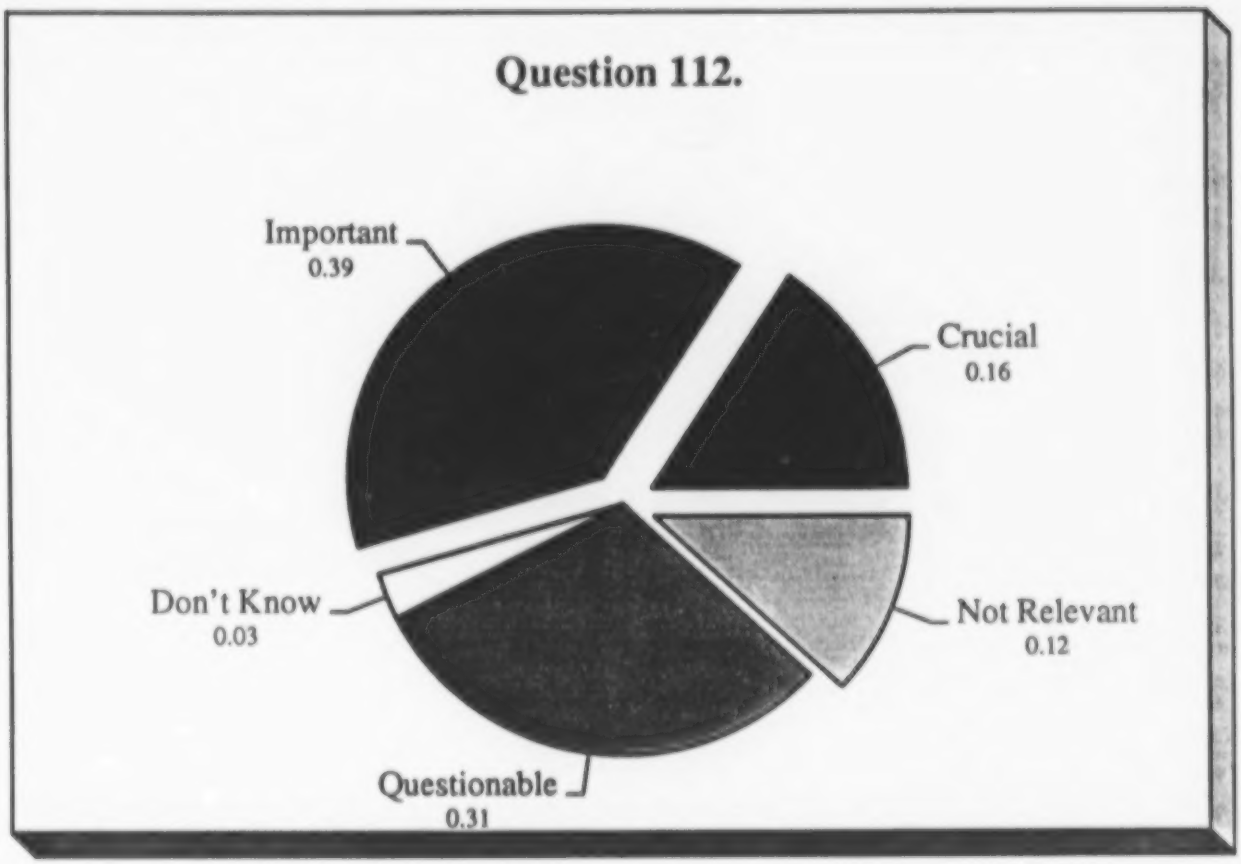
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, professional organization roles and activities?

Figure 129.



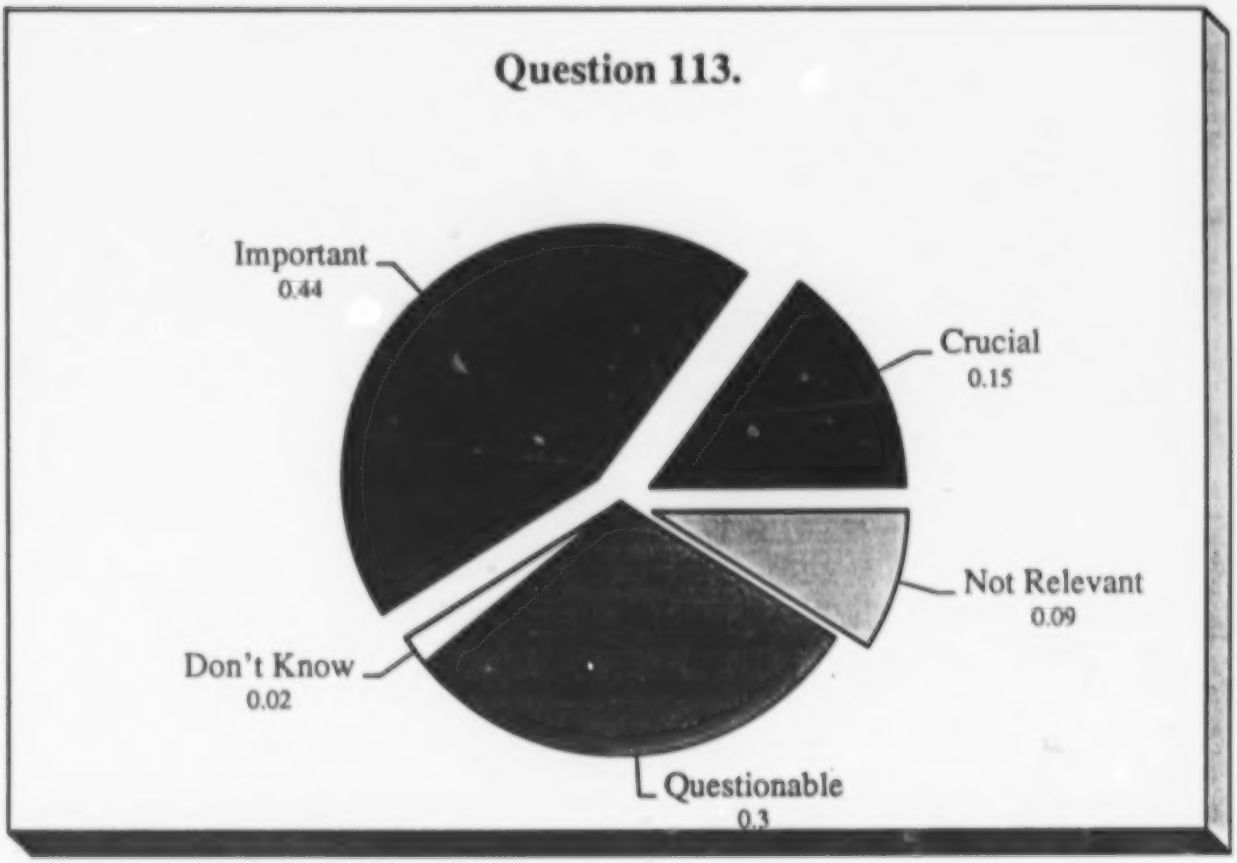
How relevant to the work you do as a practicing counselor is knowledge of the skill: apply aspects of the history of the helping professions to current professional roles, functions, and conditions?

Figure 130.



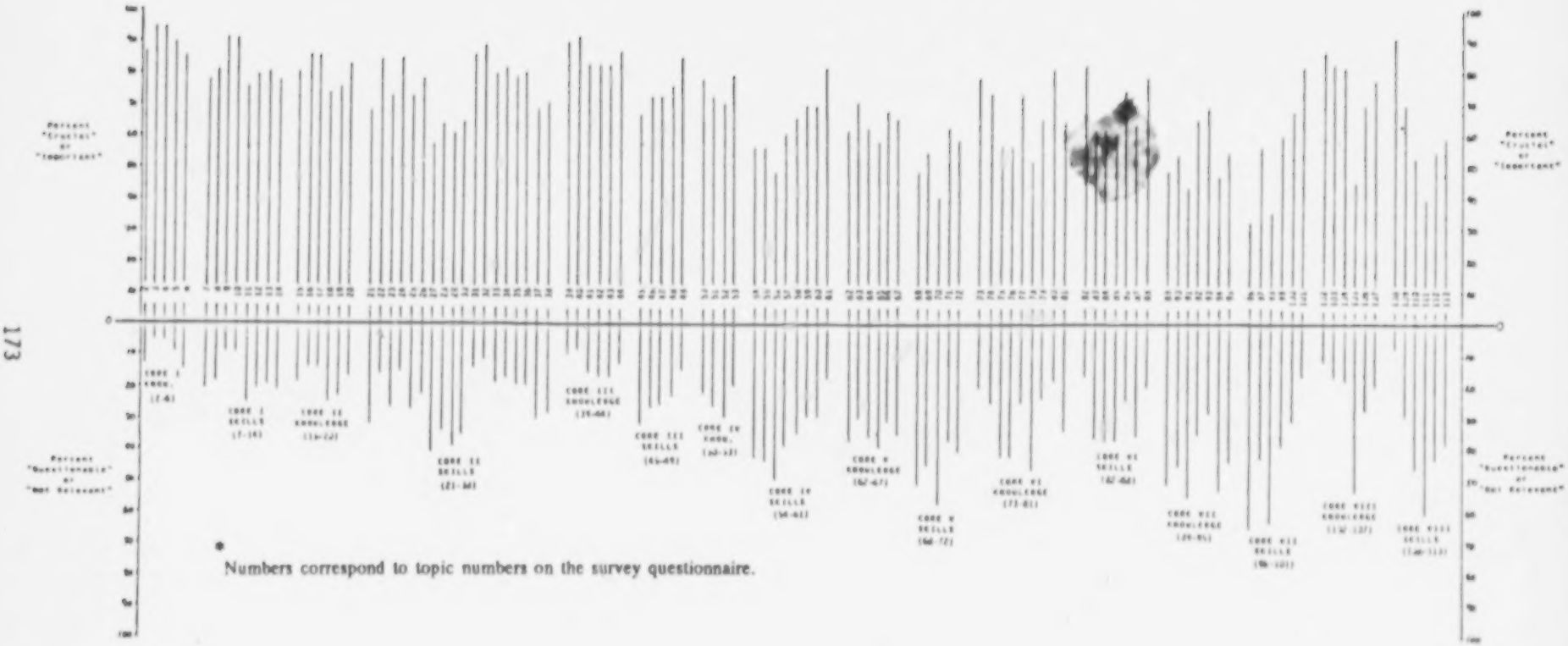
How relevant to the work you do as a practicing counselor is knowledge of the skill: explain, in operational terms, the relationship between professional preparation standards and current professional roles and functions?

Figure 131.



How relevant to the work you do as a practicing counselor is knowledge of the skill: characterize, in operational terms, the various forms of professional credentialing applicable in the helping professions?

Figure 132.



Numbers correspond to topic numbers on the survey questionnaire.

Percent of Counselors in the NBCC sample who judged each objective to be "Crucial" or "Important" and Percent who judged each objective to be "Questionable" or "Not Relevant"

FIGURE 133

and another 24 percent judged it to be "Important" (see Figure 69). In contrast, only 12 percent responded "Crucial" and another 30 percent responded "Important," when asked to judge the relevance of knowledge of the skill "explain, in operational terms, major career and leisure counseling, guidance, and education theories." A majority of respondents judged this topic to be "Questionable" or "Not Relevant" (see Figure 90). Several of the topics in the research and evaluation area (Core Area VII) also received large percentages of negative judgments of job relevance.

Judgments Expressed by Counselors in Various Specialty Areas

Sampled counselors were asked to respond to the question: "How would you classify the specialty in which you currently are practicing?" and were given the options "School," "Agency/Institution," "Community/Private," "Higher Education," and "Other." In this section, we examine the existence of a relationship between counselors' reported specialty areas and their judgments of the relevance of the NBCC Examination and its major components.

Four hundred forty-nine of the counselors who responded to the question on area of specialty also responded to Question 1: "How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination considered as a whole?" Of these, 208 (46.3%) classified their specialty area as "School," 81 (18.0%) classified their specialty area as "Agency/Institution," 73 (16.3%) classified their specialty area as "Community/Private," 78 (17.4%) classified their specialty

area as "Higher Education," and nine (2.0%) classified their specialty as "Other."

Tables 10 and 11 contain results that indicate statistically significant relationships between the responding counselors' specialty areas and their judgments of the relevance of the entire NBCC Examination. When the question on the relevance of the entire NBCC Examination was asked prior to questions on the relevance of individual Examination topics (Question 1), the chi-square statistic of association between specialty areas and relevance judgments was 27.11, which is significant at the 0.05 level. When the question on the relevance of the entire NBCC Examination was asked following questions on the relevance of individual Examination topics (Question 114), the chi-square statistic of association between specialty areas and relevance judgments was 32.40 which is significant at the 0.01 level. On the assumption that counselors' judgments were informed by their responses to questions on the relevance of individual Examination topics, we will examine in detail, only the association revealed by Table 11.

The distribution of relevance judgments of counselors who listed their specialty area as "School" closely paralleled the overall distribution of judgments shown in the "Total" column of Table 11. Counselors who listed their specialty area as "Agency/Institution" judged the NBCC Examination to be far more relevant to their work than did counselors in other specialties. Eighty-seven percent of these counselors classified the entire Examination as "Crucial" or "Important," compared to the 71 percent of judgments in these categories by the entire sample of

	AREA OF SPECIALTY					
	School	Agency/ Institution	Community/ Private	Higher Education	Other	Total
Crucial	11.5%	17.3%	15.1%	19.2%	11.1%	14.5%
Important	51.4%	64.2%	64.4%	65.4%	44.4%	58.1%
Questionable	31.3%	14.8%	20.5%	12.8%	33.3%	23.4%
Not Relevant	5.3%	2.5%	0%	2.6%	11.1%	3.6%
Don't Know	0.5%	1.2%	0%	0%	0%	0.4%
	n = 208	n = 81	n = 73	n = 78	n = 9	n = 449

$X^2 = 27.11$; significant, $p<.05$

Table 10. Percent of Counselors in each of five areas of specialty who judged the relevance of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

AREA OF SPECIALTY

	School	Agency/ Institution	Community/ Private	Higher Education	Other	Total
Crucial	19.5%	26.3%	13.3%	17.1%	10.0%	19.1%
Important	48.3%	61.3%	56.0%	51.3%	40.0%	52.2%
Questionable	25.9%	8.8%	26.7%	18.4%	30.0%	21.7%
Not Relevant	5.4%	3.8%	4.0%	11.8%	10.0%	6.1%
Don't Know	1.0%	0%	0%	1.3%	10.0%	0.9%
	n = 205	n = 80	n = 75	n = 76	n = 10	n = 446

$x^2 = 32.40$; significant, $p<.01$

Table 11. Percent of Counselors in each of five areas of specialty who judged the relevance of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Judgments followed consideration of 112 individual NBCC Examination topics. Percents are calculated within columns.

respondents. The distribution of judgments of counselors with the "Community/Private" specialty differed somewhat from the overall distribution, in that six percent fewer classified the NBCC Examination in the "Crucial" category, and five percent more classified it in the "Questionable" category. The only marked difference between the distributions of judgments of counselors in the "Higher Education" specialty and the judgments of all responding counselors was in the percent who marked the "Not Relevant" category. Almost 12 percent of counselors with specialties in Higher Education selected the "Not Relevant" category, while only six percent of the total sample of respondents chose this category. Nonetheless, almost seven out of ten counselors in the Higher Education specialty judged the NBCC Examination to be "Crucial" or "Important."

So few counselors marked "Other" as their current counseling specialty (n = 10) that the distribution of relevance judgments of these counselors is not interpretable.

It is reasonable to assume that judgments of the relevance of the major components of the NBCC Examination might differ across counselors who list various areas of practice specialty. For example, Examination topics that require knowledge of the area of human growth and development, Core Area I, might be judged to be more relevant by counselors who listed their specialty as "School" than by counselors who listed their specialty as "Community/Private." To pursue questions such as this, distributions of relevance judgments were computed separately for counselors in each of four specialty areas, for each of the eight

core areas of knowledge topics and knowledge of skills topics that compose the NBCC Examination. These distributions are shown in Tables 12 through 27, together with the results of associated chi-square tests of association.

For each core area of topics, statistically significant associations were found between the areas of specialty of responding counselors, and their distributions of expressed relevance of the topics assessed by the NBCC Examination. For seven of the eight core areas (all but Core Area VIII) the associations between counselors' specialty areas and their distributions of relevance judgments of knowledge topics were statistically significant at the 0.01 level. For Core Area VIII, the association was statistically significant at the 0.05 level.

The results of these analyses of the associations between counselors' areas of specialty and their judgments of the relevance of topics assessed by the NBCC Examination can be summarized in the following points:

Core Area I, Human Growth and Development, Knowledge Topics: (Table 12)

* A very high percentage of counselors (at least 86 percent), judged these topics to be "Crucial" or "Important," regardless of specialty area.

* Somewhat fewer "School" counselors than counselors in other specialties, judged these topics to be "Crucial."

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	36%	40%	43%	45%
Important	52%	46%	48%	47%
Questionable	9%	9%	7%	6%
Not Relevant	1%	3%	1%	2%
Don't Know	0%	2%	0%	0%

$X^2 = 34.94$; significant, $p<.01$

CORE AREA I KNOWLEDGE TOPICS

Table 12. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area I of the NBCC Examination, Human Growth and Development, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

Core Area I, Human Growth and Development, Knowledge of Skills Topics: (Table 13)

* A high percentage of counselors (at least 78 percent), judged these topics to be "Crucial" or "Important," regardless of specialty area.

* Somewhat fewer "School" counselors than counselors in other specialties, judged these topics to be "Crucial.

Core Area II, Social and Cultural Foundations, Knowledge Topics: (Table 14)

* Between 69 percent and 86 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors in the "Agency/Institution" specialty than by counselors in other specialties.

* Counselors in the "Community/Private" specialty judged these topics to be of greater relevance than did counselors in other areas of specialty.

Core Area II, Social and Cultural Foundations, Knowledge of Skills Topics: (Table 15)

* Between 64 percent and 81 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors in the "Agency/Institution" specialty than by counselors in other specialties.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	32%	37%	39%	36%
Important	47%	41%	45%	46%
Questionable	17%	16%	12%	13%
Not Relevant	3%	6%	3%	5%
Don't Know	0%	0%	0%	0%

$X^2 = 37.76$; significant, $p<.01$

CORE AREA I KNOWLEDGE OF SKILLS TOPICS

Table 13. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area I of the NBCC Examination, Human Growth and Development, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	29%	24%	37%	30%
Important	51%	45%	49%	50%
Questionable	14%	22%	8%	14%
Not Relevant	5%	9%	6%	5%
Don't Know	1%	0%	0%	1%

$X^2 = 69.41$; significant, $p.<.01$

CORE AREA II KNOWLEDGE TOPICS

Table 14. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area II of the NBCC Examination, Social and Cultural Foundations, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	27%	27%	40%	31%
Important	46%	37%	41%	42%
Questionable	18%	22%	15%	16%
Not Relevant	7%	14%	5%	10%
Don't Know	1%	0%	0%	1%

$x^2 = 201.82$; significant, $p.<.01$

CORE AREA II KNOWLEDGE OF SKILLS TOPICS

Table 15. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area II of the NBCC Examination, Social and Cultural Foundations, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

* Counselors in the "Community/Private" specialty judged these topics to be of greater relevance than did counselors in other areas of specialty.

Core Area III, Helping Relationships, Knowledge Topics: (Table 16)

* Between 80 percent and 88 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors who listed their specialty area as "Agency/Institution" judged these topics to be somewhat less relevant than did counselors in other specialty areas.

Core Area III, Helping Relationships, Knowledge of Skills Topics: (Table 17)

* Between 70 percent and 80 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Agency/Institution" specialty considered these topics to be somewhat less relevant than did counselors in other practice specialties.

* Counselors in the "Higher Education" specialty considered these topics to be somewhat more relevant to their work than did counselors in other practice specialties.

Core Area IV, Groups, Knowledge Topics: (Table 18)

* Between 54 percent and 80 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	45%	38%	52%	53%
Important	39%	42%	36%	35%
Questionable	11%	13%	8%	6%
Not 4elevant	4%	7%	3%	5%
Don't Know	0%	0%	0%	0%

x^2 = 42.91; significant, p.<.01

CORE AREA III KNOWLEDGE TOPICS

Table 16. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area III of the NBCC Examination, Helping Relationships, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	32%	25%	27%	36%
Important	41%	45%	48%	44%
Questionable	20%	19%	21%	13%
Not Relevant	6%	10%	3%	7%
Don't Know	1%	1%	2%	0%

$X^2 = 42.82$; significant, $p.<.01$

CORE AREA III KNOWLEDGE OF SKILLS TOPICS

Table 17. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area III of the NBCC Examination, Helping Relationships, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	33%	21%	33%	37%
Important	42%	43%	47%	27%
Questionable	18%	20%	8%	12%
Not Relevant	5%	15%	12%	3%
Don't Know	1%	0%	0%	21%

X^2 = 354.92, significant, p.<.01

CORE AREA IV KNOWLEDGE TOPICS

Table 18. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area IV of the NBCC Examination, Groups, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

* Counselors in the "Agency/Institution" specialty considered these topics to be less relevant than did counselors in the "School" or "Community/Private" areas of specialty.

* Counselors in the "Community/Private" specialty considered these topics to be more relevant than did counselors in other areas of specialty.

Core Area IV, Groups, Knowledge of Skills Topics: (Table 19)

* Between 54 percent and 80 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Agency/Institution" specialty considered these topics to be somewhat less relevant than did counselors in other areas of specialty.

Core Area V, Life Style and Career Development, Knowledge Topics: (Table 20)

* Between 48 percent and 86 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Community/Private" specialty judged these topics to be somewhat to substantially less relevant to their work than did counselors in other specialties.

* Counselors in the "Higher Education" specialty judged these topics to be substantially more relevant to their work than did counselors in other specialties.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	23%	18%	22%	26%
Important	41%	40%	42%	40%
Questionable	25%	25%	19%	20%
Not Relevant	10%	17%	16%	14%
Don't Know	1%	0%	1%	0%

$x^2 = 54.82$; significant, $p.<.01$

CORE AREA IV KNOWLEDGE OF SKILLS TOPICS

Table 19. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area IV of the NBCC examination, Groups, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	25%	19%	15%	40%
Important	43%	39%	33%	46%
Questionable	21%	27%	33%	10%
Not Relevant	11%	14%	18%	3%
Don't Know	0%	1%	1%	0%

$X^2 = 191.51$; significant, $p.<.01$

CORE AREA V KNOWLEDGE TOPICS

Table 20. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area V of the NBCC Examination, Life Style and Career Development, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

Core Area V, Life Style and Career Development, Knowledge of Skills Topics: (Table 21)

* Between 34 percent and 75 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Community/Private" specialty judged these topics to be somewhat to substantially less relevant to their work than did counselors in other specialties.

* Counselors in the "Higher Education" specialty judged these topics to be substantially more relevant to their work than did counselors in other specialties.

Core Area VI, Assessment, Knowledge Topics: (Table 22)

* Between 54 percent and 74 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Community/Private" specialty judged these topics to be somewhat less relevant to their work than did counselors in other specialties.

* Thirty-six percent of counselors in the "Agency/Institution" specialty judged these topics to be in the "Questionable" or "Not Relevant" categories.

Core Area VI, Assessment, Knowledge of Skills Topics: (Table 23)

* Between 56 percent and 73 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	20%	17%	14%	37%
Important	37%	26%	20%	38%
Questionable	27%	32%	41%	20%
Not Relevant	16%	24%	24%	5%
Don't Know	0%	1%	1%	0%

X^2 = 181.75; significant, p.<.01

CORE AREA V KNOWLEDGE OF SKILLS TOPICS

Table 21. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area V of the NBCC Examination, Life Style and Career Development, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	26%	26%	17%	29%
Important	47%	37%	37%	45%
Questionable	17%	20%	29%	19%
Not Relevant	9%	16%	17%	5%
Don't Know	1%	1%	0%	2%

X^2 = 137.61; significant, p.<.01

CORE AREA VI KNOWLEDGE TOPICS

Table 22. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area VI of the NBCC Examination, Assessment, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	29%	24%	17%	26%
Important	44%	48%	39%	45%
Questionable	17%	16%	22%	18%
Not Relevant	9%	11%	20%	10%
Don't Know	1%	1%	1%	2%

x^2 = 80.72; significant, p.<.01

CORE AREA V KNOWLEDGE OF SKILLS TOPICS

Table 23. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area VI of the NBCC Examination, Assessment, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

* Counselors in the "Community/Private" specialty judged these topics to be somewhat less relevant to their work than did counselors in other specialties.

Core Area VII, Research and Evaluation, Knowledge Topics: (Table 24)

* Between 49 percent and 61 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Community/Private" specialty judged these topics to be somewhat less relevant to their work than did counselors in other specialties.

Core Area VII, Research and Evaluation, Knowledge of Skills Topics: (Table 25)

* Between 46 percent and 63 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Community/Private" specialty judged these topics to be somewhat less relevant to their work than did counselors in other specialties.

Core Area VIII, Professional Orientation, Knowledge Topics: (Table 26)

* Between 72 percent and 77 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Although the relationship between counseling specialty and judgment of the relevance of these topics was statistically significant at the 0.05 level, the sample distributions of

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	15%	18%	8%	18%
Important	36%	43%	41%	41%
Questionable	30%	21%	30%	29%
Not Relevant	18%	17%	20%	12%
Don't Know	1%	1%	1%	0%

$X^2 = 55.90$; significant, $p.<.01$

CORE AREA VII KNOWLEDGE TOPICS

Table 24. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area VII of the NBCC Examination, Research and Evaluation, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	17%	22%	13%	18%
Important	40%	41%	33%	37%
Questionable	23%	17%	27%	29%
Not Relevant	19%	18%	26%	15%
Don't Know	1%	1%	1%	1%

$X^2 = 50.62$; significant, $p.<.01$

CORE AREA VII KNOWLEDGE OF SKILLS TOPICS

Table 25. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area VII of the NBCC Examination, Research and Evaluation, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	29%	28%	27%	24%
Important	44%	49%	46%	48%
Questionable	19%	19%	22%	20%
Not Relevant	6%	3%	4%	8%
Don't Know	1%	1%	0%	1%

$X^2 = 24.60$; significant, $p<.05$

CORE AREA VIII KNOWLEDGE OF TOPICS

Table 26. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge topics in Core Area VIII of the NBCC Examination, Professional Orientation, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

judgments produced by counselors in different specialty areas did not differ appreciably. Slightly more counselors with specialty in "Higher Education" provided judgments in the "Not Relevant" category.

Core Area VIII, Professional Orientation, Knowledge of Skills Topics: (Table 27)

* Between 57 percent and 71 percent of counselors in various specialties considered these topics to be "Crucial" or "Important."

* Counselors in the "Community/Private" specialty and the "Higher Education" specialty judged these topics to be somewhat less relevant to their work than did counselors in the other two specialties.

Judgments Expressed by Counselors with Various College Majors

Sampled counselors were asked to respond to the question: "Which category best describes the college or university major which prepared you for your work as a counselor? MARK THE ONE CATEGORY THAT BEST DESCRIBES YOUR HIGHEST LEVEL DEGREE OR CERTIFICATE." and were given the options "Counseling," "Psychology," "Social Work," "Education," and "Other." In this section, we examine the existence of relationships between counselors' reported college or university majors and their judgments of the relevance of the NBCC Examination and its major components.

Of the 518 counselors who responded to the question concerning their college and university major during their highest degree or certificate, and to the initial question on the job relevance of the NBCC Examination (Question 1), 361 (almost

	School	Agency/ Institution	Community/ Private	Higher Education
Crucial	25%	23%	20%	18%
Important	35%	48%	39%	39%
Questionable	28%	19%	33%	31%
Not Relevant	11%	7%	8%	11%
Don't Know	1%	3%	0%	1%

$X^2 = 54.82$; significant, $p.<.01$

CORE AREA VIII KNOWLEDGE OF SKILLS TOPICS

Table 27. Percent of counselors in each of four areas of specialty who judged the relevance of knowledge of skills topics in Core Area VIII of the NBCC Examination, Professional Orientation, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

70%) listed their major as "Counseling." Another 71 (13.7%) listed their major as "Psychology," 27 (5.2%) listed their major as "Social Work," 49 (9.5%) listed their major as "Education," and 10 (1.9%) listed their major as "Other."

Tables 28 and 29 contain results that indicate statistically significant relationships between the responding counselors' college or university majors during their highest degree and their judgments of the relevance of the entire NBCC Examination. When the question on the relevance of the entire NBCC Examination was asked prior to questions on the relevance of individual Examination topics (Question 1), the chi-square statistic of association between college or university major and relevance judgments was 39.31, which is significant at the 0.001 level (see Table 28). When the question on the relevance of the entire NBCC Examination was asked following questions on the relevance of individual Examination topics (Question 114), the chi-square statistic of association between college or university major and relevance judgments was 49.94 which is also significant at the 0.001 level (see Table 29). On the assumption that counselors' judgments were informed by their responses to questions on the relevance of individual Examination topics, we will examine in detail, only the association revealed by Table 29.

A clear majority of the counselors who reported each of the college or university majors classified the NBCC Examination in either the "Crucial" or "Important" categories, with 80 percent of those who reported "Psychology" as their major so classifying the Examination, and 66 percent of those who reported "Education" as their major so classifying the Examination.

COLLEGE MAJOR DURING HIGHEST DEGREE

	Counseling	Psychology	Social Work	Education	Other	Total
Crucial	11.4%	28.2%	29.6%	18.4%	0%	15.1%
Important	56.8%	56.3%	59.3%	57.1%	60.0%	56.9%
Questionable	27.4%	11.3%	7.4%	22.4%	30.0%	23.7%
Not Relevant	4.2%	1.4%	0%	2.0%	10.0%	3.5%
Don't Know	0.3%	2.8%	3.7%	0%	0%	0.8%
	n = 361	n = 71	n = 27	n = 49	n = 10	n = 518

$X^2 = 39.31$; significant, $p<.001$

Table 28. Percent of counselors with each of five majors during their highest-level degree or certificate who judged the relevance of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

COLLEGE MAJOR DURING HIGHEST DEGREE

	Counseling	Psychology	Social Work	Education	Other	Total
Crucial	15.2%	34.3%	33.3%	17.0%	0%	18.6%
Important	55.1%	45.7%	37.0%	48.9%	50.5%	52.2%
Questionable	24.4%	15.7%	11.1%	23.4%	40.0%	22.7%
Not Relevant	4.7%	1.4%	18.5%	10.6%	0%	5.4%
Don't Know	0.6%	2.9%	0%	0%	10.0%	1.0%
	n = 361	n = 70	n = 27	n = 47	n = 10	n = 515

$X^2 = 49.94$; significant, $p<.001$

Table 29. Percent of counselors with each of five majors during their highest-level degree or certificate who judged the relevance of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Judgments followed consideration of 112 individual NBCC Examination topics. Percents are calculated within columns.

Percentages of positive relevance judgments from those with the other two specific college or university majors fell between these two values.

The small number of responding counselors who reported their college or university major as "Social Work" (n = 27) makes the distribution of judgments of these respondents largely uninterpretable. In more detailed analyses of relationships between college or university major and judgments of the relevance of the NBCC Examination (discussed below) we have attempted to compensate for small sample sizes by pooling the judgments of those who listed their college or university major as "Social Work," "Education," or "Other." The advantages of securing a relatively stable distribution of judgments for this collective sample outweigh the risk of obscuring possible differences in judgment between the subsamples.

In summary, the large chi-square value associated with Table 29 can be attributed primarily to the more-favorable judgments of the relevance of the NBCC Examination expressed by those who majored in Psychology, and the somewhat less-favorable judgments expressed by those who majored in Education or Social Work.

It is quite possible that judgments of the relevance of the major components of the NBCC Examination might differ across counselors who list different college or university majors during the pursuit of their highest degree or certificate, since academic preparation programs vary in their curricula and in their emphases on the development of specific counseling skills. For example, Examination topics that require knowledge of the area of

human growth and development, Core Area I, might be judged to be more relevant by counselors who listed their major as "Counseling" than by counselors who listed their major as "Psychology." To pursue questions such as this, distributions of relevance judgments were computed separately for counselors in each of three categories of college or university major. As noted above, because the sizes of individual samples were small, the judgments of counselors who listed their majors as "Social Work," "Education," or "Other" were pooled. Distributions of relevance judgments for counselors who reported majors in "Counseling," "Psychology," and the pooled category just described were computed and compared for each of the eight core areas of knowledge topics and knowledge of skills topics that compose the NBCC Examination. These distributions are shown in Tables 30 through 45, together with the results of associated chi-square tests of association.

For all but Core Area I, Human Growth and Development, statistically significant associations were found between the reported college or university majors of responding counselors, and their distributions of judged relevance of the topics assessed by the NBCC Examination. For the seven remaining core areas, the associations between counselors' reported college or university major and their distributions of relevance judgments of knowledge topics were statistically significant at the 0.01 level. For Core Area I, the association was not statistically significant at the 0.05 level.

The results of these analyses of the associations between counselors' reported college or university majors and their

judgments of the relevance of topics assessed by the NBCC Examination can be summarized in the following points:

Core Area I, Human Growth and Development, Knowledge Topics: (Table 30)

* A very high percentage of counselors (at least 88 percent), judged these topics to be "Crucial" or "Important," regardless of college or university major.

* There were no appreciable differences between the distributions of relevance judgments of these topics expressed by counselors with different college or university majors.

Core Area I, Human Growth and Development, Knowledge of Skills Topics: (Table 31)

* A high percentage of counselors (at least 79 percent), judged these topics to be "Crucial" or "Important," regardless of college or university major.

* The distributions of relevance judgments of counselors who reported various college or university majors were quite similar.

Core Area II, Social and Cultural Foundations, Knowledge Topics: (Table 32)

* Between 63 percent and 85 percent of counselors with various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors who majored in "Psychology" than by counselors who reported other college or university majors.

	Counseling	Psychology	Social Work, Education, Other
Crucial	41%	41%	38%
Important	50%	47%	53%
Questionable	8%	9%	7%
Not Relevant	2%	1%	2%
Don't Know	0%	1%	1%

$X^2 = 7.27$; not significant

CORE AREA I KNOWLEDGE TOPICS

Table 30. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge topics in Core Area I of the NBCC Examination, Human Growth and Development, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	38%	36%	34%
Important	45%	43%	47%
Questionable	14%	16%	14%
Not Relevant	3%	5%	5%
Don't Know	0%	0%	0%

X^2 = 15.36; not significant

CORE AREA I KNOWLEDGE OF SKILLS TOPICS

Table 31. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge of skills topics in Core Area I of the NBCC Examination, Human Growth and Development, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	35%	22%	30%
Important	50%	41%	47%
Questionable	11%	26%	14%
Not Relevant	3%	11%	9%
Don't Know	1%	0%	0%

X^2 = 136.86; significant, p.<.01

CORE AREA II KNOWLEDGE TOPICS

Table 32. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of knowledge of skills topics in Core Area II of the NBCC Examination, Social and Cultural Foundations, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

Core Area II, Social and Cultural Foundations, Knowledge of Skills Topics: (Table 33)

* Between 61 percent and 77 percent of counselors with various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors who majored in "Psychology" than by counselors who reported other college or university majors.

Core Area III, Helping Relationships, Knowledge Topics: (Table 34)

* Between 74 percent and 89 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors who majored in "Psychology" than by counselors who reported other college or university majors.

Core Area III, Helping Relationships, Knowledge of Skills Topics: (Table 35)

* Between 69 percent and 76 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be slightly less relevant by counselors who majored in "Psychology" than by counselors who reported other college or university majors.

Core Area IV, Groups, Knowledge Topics: (Table 36)

* Between 64 percent and 78 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

	Counseling	Psychology	Social Work, Education, Other
Crucial	32%	25%	34%
Important	45%	36%	40%
Questionable	16%	25%	15%
Not Relevant	6%	13%	11%
Don't Know	1%	1%	0%

X^2 = 197.44; significant, p.<.01

CORE AREA II KNOWLEDGE OF SKILLS TOPICS

Table 33. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of knowledge of skills topics in Core Area II of the NBCC Examination, Social and Cultural Foundations, to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	53%	33%	44%
Important	36%	41%	39%
Questionable	7%	19%	10%
Not Relevant	3%	8%	6%
Don't Know	1%	0%	0%

X^2 = 120.99; significant, p.<.01

CORE AREA III KNOWLEDGE TOPICS

Table 34. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of knowledge topics in Core Area III, Helping Relationships, of the NBCC Examination to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	34%	29%	28%
Important	42%	40%	48%
Questionable	18%	22%	15%
Not Relevant	4%	9%	10%
Don't Know	1%	1%	0%

$X^2 = 39.08$; significant, $p.<.01$

CORE AREA III KNOWLEDGE OF SKILLS TOPICS

Table 35. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of knowledge of skills topics in Core Area III, Helping Relationships, of the NBCC Examination to their work as practicing counselors, in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	37%	20%	31%
Important	41%	44%	42%
Questionable	14%	24%	15%
Not Relevant	7%	12%	12%
Don't Know	1%	0%	0%

$x^2 = 51.98$; significant, $p.<.01$

CORE AREA IV KNOWLEDGE TOPICS

Table 36. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge topics in Core Area IV, Groups, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

* These topics were judged to be somewhat less relevant by counselors who majored in "Psychology" than by counselors who reported other college or university majors.

Core Area IV, Groups, Knowledge of Skills Topics: (Table 37)

* Between 60 percent and 65 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat more relevant by counselors who majored in "Counseling" than by counselors who reported other college or university majors.

Core Area V, Life Style and Career Development, Knowledge Topics: (Table 38)

* Between 64 percent and 71 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be slightly more relevant by counselors who majored in "Social Work," "Education," or "Other" than by counselors who reported majors in "Counseling" or "Psychology."

Core Area V, Life Style and Career Development, Knowledge of Skills Topics: (Table 39)

* Between 49 percent and 61 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

	Counseling	Psychology	Social Work, Education, Other
Crucial	24%	19%	23%
Important	41%	41%	38%
Questionable	22%	24%	23%
Not Relevant	12%	16%	16%
Don't Know	1%	1%	0%

X^2 = 30.09; significant, p.<01

CORE AREA IV KNOWLEDGE OF SKILLS TOPICS

Table 37. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge of skills topics in Core Area IV, Groups, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	25%	19%	29%
Important	39%	45%	42%
Questionable	23%	24%	17%
Not Relevant	13%	10%	11%
Don't Know	1%	2%	0%

$X^2 = 29.17$; significant, $p.<.01$

CORE AREA V KNOWLEDGE TOPICS

Table 38. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge topics in Core Area V, Life Style and Career Development, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	22%	16%	24%
Important	31%	33%	37%
Questionable	28%	32%	21%
Not Relevant	19%	18%	17%
Don't Know	0%	1%	0%

x^2 = 23.78; significant, p.<.01

CORE AREA V KNOWLEDGE OF SKILLS TOPICS

Table 39. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge of skills topics in Core Area V, Life Style and Career Development, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

* These topics were judged to be slightly more relevant by counselors who majored in "Social Work," "Education," or "Other" than by counselors who reported majors in "Counseling" or "Psychology."

Core Area VI, Assessment, Knowledge Topics: (Table 40)

* Between 64 percent and 72 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors who majored in "Social Work," "Education," or "Other" than by counselors who reported majors in "Counseling" or "Psychology."

Core Area VI, Assessment, Knowledge of Skills Topics: (Table 41)

* Between 64 percent and 72 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat more relevant by counselors who reported their major as "Psychology" than by counselors who reported other college or university majors.

Core Area VII, Research and Evaluation, Knowledge Topics: (Table 42)

* Between 51 percent and 69 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat more relevant by counselors who reported their major as "Psychology" than by counselors who reported other college or university majors.

	Counseling	Psychology	Social Work, Education, Other
Crucial	24%	38%	28%
Important	45%	34%	36%
Questionable	19%	16%	23%
Not Relevant	11%	8%	12%
Don't Know	1%	3%	1%

X^2 = 101.00; significant, p.<.01

CORE AREA VI KNOWLEDGE TOPICS

Table 40. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge topics in Core Area VI, Assessment, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	25%	39%	24%
Important	43%	43%	44%
Questionable	19%	11%	19%
Not Relevant	12%	7%	12%
Don't Know	2%	0%	1%

$X^2 = 66.53$; significant, $p.<.01$

CORE AREA VI KNOWLEDGE OF SKILLS TOPICS

Table 41. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge of skills topics in Core Area VI, Assessment, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	13%	28%	15%
Important	38%	41%	44%
Questionable	29%	20%	27%
Not Relevant	19%	10%	14%
Don't Know	1%	1%	0%

X^2 = 110.83; significant, p.<.01

CORE AREA VII KNOWLEDGE TOPICS

Table 42. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge topics in Core Area VII, Research and Evaluation, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

Core Area VII, Research and Evaluation, Knowledge of Skills Topics: (Table 43)

* Between 53 percent and 70 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat more relevant by counselors who reported their major as "Psychology" than by counselors who reported other college or university majors.

Core Area VIII, Professional Orientation, Knowledge Topics: (Table 44)

* Between 67 percent and 77 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat less relevant by counselors who majored in "Social Work," "Education," or "Other" than by counselors who reported majors in "Counseling" or "Psychology."

Core Area VIII, Professional Orientation, Knowledge of Skills Topics: (Table 45)

* Between 59 percent and 74 percent of counselors who reported various college or university majors considered these topics to be "Crucial" or "Important."

* These topics were judged to be somewhat more relevant by counselors who reported their major as "Psychology" than by counselors who reported other college or university majors.

	Counseling	Psychology	Social Work, Education, Other
Crucial	16%	25%	17%
Important	37%	45%	40%
Questionable	24%	16%	27%
Not Relevant	21%	13%	16%
Don't Know	1%	1%	1%

$X^2 = 56.57$; significant, $p.<.01$

CORE AREA VII KNOWLEDGE OF SKILLS TOPICS

Table 43. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge of skills topics in Core Area VII, Research and Evaluation, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	29%	31%	23%
Important	46%	46%	44%
Questionable	19%	15%	23%
Not Relevant	5%	4%	9%
Don't Know	1%	3%	1%

$x^2 = 36.85$; significant, $p.<.01$

CORE AREA VIII KNOWLEDGE TOPICS

Table 44. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge topics in Core Area VIII, Professional Orientation, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

	Counseling	Psychology	Social Work, Education, Other
Crucial	22%	29%	17%
Important	37%	45%	42%
Questionable	29%	18%	28%
Not Relevant	10%	5%	12%
Don't Know	2%	3%	1%

$x^2 = 55.65$; significant, $p.<.01$

CORE AREA VIII KNOWLEDGE OF SKILLS TOPICS

Table 45. Percent of counselors with designated majors during their highest-level degree or certificate who judged the relevance of the knowledge of skills topics in Core Area VIII, Professional Orientation, of the NBCC Examination to their work as practicing counselors in each of five relevance categories. Percents are calculated within columns.

Analysis of the Relationship Between Relevance Judgments and Membership in Various Racial or Ethnic Groups

In this section of our analysis of results we examine the judged relevance of the NBCC Examination by counselors who reported membership in various racial or ethnic groups. As noted earlier, this section provides results that bear indirectly on the perceived fairness of the Examination by members of various racial or ethnic groups. Consistently positive perceptions of relevance could be advanced as an argument in support of the equity of the Examination, in terms of perceived racial impact.

Data displayed in Tables 46 & 47 bear on the association between racial or ethnic group membership and judged relevance of the NBCC Examination. Judgments expressed prior to consideration of the individual topics assessed by the NBCC Examination are summarized in Table 46. Judgments expressed following consideration of the individual topics assessed by the NBCC Examination are summarized in Table 47. The distributions of judgments shown in the two tables are quite similar. Because we expect counselors' judgments to be better informed following their consideration of the individual topics assessed by the NBCC examination, we only will provide a detailed discussion of the results shown in Table 47.

Before interpreting the data in Table 47, it must be noted that they are somewhat suspect. Because of technological limitations (Our mark-sense response form allowed only five options per item.), data on racial or ethnic group membership had to be collected through two questions. The first read: "Would you classify yourself as a member of any of the following racial or

	White Non-Hispanic	Black	Puerto Rican Mexican-American Hispanic	American Indian	Oriental, Asian-American	Other	Total
Crucial	(57) 14.0%	(16) 21.6%	(1) 11.1%	(1) 25.0%	(17) 30.4%	(13) 33.3%	(105) 17.8%
Important	(238) 58.3%	(40) 54.1%	(5) 55.6%	(2) 50.0%	(29) 51.8%	(20) 51.3%	(334) 56.6%
Questionable	(99) 24.3%	(13) 17.6%	(1) 11.1%	(1) 25.0%	(6) 10.7%	(6) 15.4%	(126) 21.4%
Not Relevant	(12) 2.9%	(3) 4.1%	(2) 22.2%	(0) 0%	(3) 5.4%	(0) 0%	(20) 3.4%
Don't Know	(2) 0.5%	(2) 2.7%	(0) 0%	(0) 0%	(1) 1.8%	(0) 0%	(5) 0.8%
	n = 408	n = 74	n = 9	n = 4	n = 56	n = 39	n = 590

$\chi^2 = 38.02$; significant, $p<.01$

Table 46. Percent (and number) of various racial and ethnic groups who judged the relevance of the entire NBCC Examination to their work as practicing counselors to be in each of five relevance categories. Percents are calculated within columns. NOTE: Simultaneous responses in more than one ethnic group category occurred.

	White Non-Hispanic	Black	Puerto Rican Mexican-American Hispanic	American Indian	Oriental, Asian-American	Other	Total
Crucial	(79) 19.5%	(12) 16.7%	(1) 11.1%	(2) 50.0%	(27) 47.4%	(11) 28.9%	(132) 22.5%
Important	(214) 52.7%	(37) 51.4%	(4) 44.4%	(0) 0%	(23) 40.4%	(16) 42.1%	(294) 50.2%
Questionable	(95) 23.4%	(12) 16.7%	(3) 33.3%	(0) 0%	(4) 7.0%	(4) 10.5%	(118) 20.1%
Not Relevant	(15) 3.7%	(9) 12.5%	(1) 11.1%	(2) 50.0%	(3) 5.3%	(6) 0%	(36) 6.1%
Don't Know	(3) 0.7%	(2) 2.8%	(0) 0%	(0) 0%	(0) 0%	(1) 2.6%	(6) 1.0%
	n = 406	n = 72	n = 9	n = 4	n = 57	n = 38	n = 586

$x^2 = 67.51$; significant, $p<.001$

Table 47. Percent (and number) of various racial and ethnic groups who judged the relevance of the entire NBCC Examination to their work as practicing counselors to be in each of five relevance categories. Judgments followed consideration of 112 individual topics assessed by the NBCC Examination. Percents are calculated within columns. NOTE: Simultaneous responses in more than one ethnic group category occurred.

ethnic groups? DARKEN ONLY ONE BUBBLE." The categories provided were: "White," "non-Hispanic," "Black," "Puerto Rican/Mexican-American," "Hispanic," "American Indian," and "None of the above." The stem of the second question was identical to that of the first, and provided the following response options: "Oriental/Asian-American," "Other than a group listed in Question 117 or 118A," and "(I darkened a bubble in Question 117)." Each question included detailed instructions for skipping ahead in the questionnaire, depending on the response option selected. Because the total numbers of responses shown in Tables 46 and 47 exceed the number of respondents to the survey by 58 and 54 respectively, we must conclude that our response instructions were ignored by some counselors and that more than one response option was marked. Thus the results shown in Tables 46 and 47 must be interpreted with caution; however, our interpretation will treat the data as though they were valid.

Tables 46 and 47 indicate the presence of a statistically significant relationship between racial or ethnic group membership and judged relevance of the NBCC Examination. The relationship assessed prior to consideration of the individual topics assessed by the NBCC Examination produced a chi-square value of 38.02, which was statistically significant at the 0.01 level (see Table 46). The relationship assessed following consideration of the individual topics assessed by the NBCC Examination produced a chi-square value of 67.51, which was statistically significant at the 0.001 level. The sample sizes associated with several of the racial and ethnic group categories shown in Table 47 were so small that the resulting distributions of judgments are

uninterpretable. These include the distributions for "Puerto Rican/Mexican American/Hispanic" and "American Indian." Neglecting these distributions, it appears that the significant chi-square value resulted primarily because members of the "Oriental/Asian-American" and "Other" ethnic groups judged the NBCC Examination to be somewhat more relevant to their work than did members of the "White, non-Hispanic" and "Black" groups. The distributions of judgments for the latter two groups were quite similar, except that 12.5 percent of the "Black" group (nine persons) judged the NBCC Examination to be "Not Relevant," while only 3.7 percent of the "White, non-Hispanic" group (15 persons) judged the examination to be in the "Not Relevant" category. Apart from this difference in distributions, members of minority ethnic or racial groups appeared to judge the relevance of the NBCC Examination more positively than did members of the "White, non-Hispanic" group. Tables 46 and 47 also reveal that a majority of members of all racial and ethnic groups judged the relevance of the NBCC Examination to be "Crucial" or "Important." Sixty-eight percent of "Black" respondents placed their judgments in these two categories. Corresponding percentages for other ethnic and racial groups were even larger.

For the most part, judgments of the relevance of the NBCC Examination expressed by members of racial or ethnic minority groups indicated that these groups perceived the Examination to be no less relevant to their work than did members of the "White, non-Hispanic" group. This conclusion must be tempered by the

somewhat more negative distribution of judgments expressed by members of the "Black" group, noted above.

THE NATIONAL BOARD FOR CERTIFIED COUNSELORS

SURVEY OF NATIONAL CERTIFIED COUNSELORS

DIRECTIONS FOR COMPLETING THE SURVEY:

1. In addition to this Survey Questionnaire, you will find three Response Forms and a Stamped Return Envelope in this package. If you do not have all of these materials, **please call or write immediately** to:

NBCC Survey
Center for Educational Research and Evaluation
University of North Carolina
Greensboro, North Carolina 27412-5001
(919) 379-5883

2. You may recall that the National Board for Certified Counselors Examination contains questions in each of eight Core Areas. This questionnaire is organized in the same way. You will be asked to rate the relevance of topics in each of the Core Areas of the NBCC Examination to the work you do as a practicing counselor. Because the NBCC Examination is based on 113 topics, the questionnaire is necessarily lengthy. You may wish to take brief breaks after you complete each of the three enclosed Response Forms.

3. Please read each of the questions completely. Be sure that you provide an answer for **every** question. If you feel that you cannot rate the **relevance** of a topic, please select the **DON'T KNOW** response.

4. All questions are to be answered by marking one of the three Response Forms enclosed. You will notice that Response Form 1 is to be used when you answer Questions 1 through 40; Response Form 2 is to be used when you answer Questions 41 through 80; and Response Form 3 is to be used when you answer Questions 81 through 114, Demographic Questions 115 through 118, and Free-response Questions 119 through 121. Please make sure that you answer each group of questions on the correct Response Form and that you are using the correct line on the Response Form when you answer each question.

5. Since the Response Forms will be read by an optical scanning machine, it is **important that you do not fold, crease, or wrinkle the forms and that you do not make any stray marks on the forms.** Use the enclosed #2 pencil to fill in the bubble on the Response Form that corresponds to your chosen response to each question. Be sure that you **completely darken** the bubble that corresponds to your response.

6. Please return **only the three Response Forms** in the enclosed, stamped envelope. PLEASE DO NOT FOLD OR CREASE THE RESPONSE FORMS.

THANK YOU

THE NATIONAL BOARD FOR CERTIFIED COUNSELORS

SURVEY OF NATIONAL CERTIFIED COUNSELORS

Please respond to the following questions on the enclosed Response Forms by darkening the bubble corresponding to the response that best describes your judgment. Note that the Response Forms contain incomplete paraphrasings of the topic of each question. Be sure to read each complete question before you respond.

Please select one of these responses for Questions 1 through 114:

Knowledge **CRUCIAL** to practice as a counselor
Knowledge **IMPORTANT** to practice as a counselor
Knowledge OF **QUESTIONABLE** RELEVANCE to practice as a counselor
Knowledge **NOT RELEVANT** to practice as a counselor
DON'T KNOW

USE RESPONSE FORM 1 FOR QUESTIONS 1 THROUGH 40

1. How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination considered as a whole?

*THE FOLLOWING JESTIONS (2-113) ASK YOU TO EVALUATE HOW **RELEVANT** YOU FEEL EACH OF THE TOPICS THAT COMPOSE THE NBCC EXAMINATION IS **TO YOUR PRACTICE AS A COUNSELOR.** PLEASE MARK A RESPONSE FOR **EACH** QUESTION.*

CORE AREA I: HUMAN GROWTH AND DEVELOPMENT

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

2. life-span theories of physiological, intellectual, emotional, attitudinal, and social human development, including proponents and behavioral indicators.

3. self-concept development and evolution, including major theories, proponents, influencing factors, and behavioral indicators.

4. personality development and evolution, including major theories, proponents, influencing factors, and behavioral indicators.

5. normal and abnormal human behavior, including primary psychological and sociological characteristics and behavioral indicators.

6. learning theory, including major theories, proponents, characteristics, factors influencing applications, and behavioral indicators.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

7. knowing how to identify and explain, in operational terms, an individual's psychological and social points of development, using major life-span theories of human growth and development.

8. knowing how to apply principles of major life-span theories of human growth and development to facilitate change in an individual.

9. knowing how to explain, in operational terms, an individual's current self-concept.

10. knowing how to apply principles of self-concept theories to facilitate improvement of an individual's self-concept.

11. knowing how to characterize, in operational terms, an individual's personality, using major personality theories.

12. knowing how to apply principles of major personality theories to facilitate change in an individual's personality.

13. knowing how to identify and explain, in operational terms, abnormal (e.g., deviant, pathological or sociopathic) behavior.

14. knowing how to apply principles of major learning theories to facilitate change in individuals.

CORE AREA II: SOCIAL AND CULTURAL FOUNDATIONS

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

15. trends and changes in society, including educational, political, sociological, economic, and technological influences, conflicts within society, methods of conflict resolution, and responses to change.

16. trends and changes in human roles, including traditional and nontraditional male and female roles, factors influencing role development, role conflict, and methods of conflict resolution.

17. marital/familial situations and trends, including traditional and nontraditional situations, effective and ineffective marital/familial interactions, factors influencing interactions and relationships, methods of marital/familial conflict resolution, and parent, child, and sibling roles.

18. multicultural trends, including characteristics and concerns of subgroups, subgroup and societal interaction patterns, and methods of conflict resolution.

19. human sexuality, including social mores and values, differing patterns of sexuality, factors influencing sexual adjustment, and methods of facilitating sexual adjustment.

20. major societal concerns, including stress, person abuse, substance abuse, discrimination on the basis of human characteristics such as: age, race, religious preference, physical condition, sexual preference, ethnicity, or gender, and methods for alleviating these concerns.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

21. explain, in operational terms, the impacts of major societal trends and changes on individuals in society.

22. apply principles of helping relationships to facilitate coping among individuals confronting societal changes.

23. explain, in operational terms, the nature of human roles held by an individual.

24. apply principles of helping relationships to facilitate effective individual role(s) adjustment(s).

25. explain, in operational terms, marital/familial interaction patterns.

26. apply principles of helping relationships to facilitate effective marital/familial interactions and adjustments.

27. explain, in operational terms, effective and ineffective behaviors of subgroups and subgroup members.

28. apply principles of helping relationships to facilitate effective interactions and adjustments for subgroups, subgroup members, and society.

29. explain, in operational terms, factors influencing sexual adjustment.

30. apply principles of helping relationships to facilitate effective sexual adjustment.

31. explain, in operational terms, major causes and results of excessive stress.

32. apply principles of helping relationships to facilitate stress reduction.

33. explain, in operational terms, factors influencing and/or causing person abuse.

34. apply principles of helping relationships to facilitate elimination of person abuse.

35. explain, in operational terms, factors influencing and/or causing substance abuse.

36. apply principles of helping relationships to facilitate elimination of substance abuse.

37. explain, in operational terms, the nature of and factors influencing discrimination against persons on the bases of human characteristics.

38. apply principles of helping relationships to facilitate elimination of discrimination against persons on the bases of human characteristics.

CORE AREA III: HELPING RELATIONSHIPS

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

39. counselor or consultant characteristics and behaviors that influence helping processes, including verbal and nonverbal behaviors and personal characteristics, orientations, and skills.

40. client or consultee characteristics and behaviors that influence helping processes, including verbal and nonverbal behaviors and personal traits, characteristics, capabilities, and life circumstances.

USE RESPONSE FORM 2 FOR QUESTIONS 41 THROUGH 80

41. factors (other than participants) that influence helping processes: environmental and social factors, relationships external to the helping process, and commitment to change.

42. counseling and consultation theories, including major theories, proponents, advantages and limitations, factors considered in application, and behavioral manifestations.

43. basic and advanced helping skills, including philosophic and theoretical bases, proponents, advantages and limitations, factors considered in applications, and behavioral manifestations.

44. implementation of helping processes, including goal setting, process control behaviors, determination of process parameters, responsibilities, and appropriate behaviors, and methods for evaluating effectiveness.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

45. explain, in operational terms, counselor or consultant orientations to helping processes.

46. explain, in operational terms, counselor or consultant verbal and nonverbal behaviors in helping processes.

47. explain and self-evaluate levels of helping skills.

48. explain, in operational terms, internal and external factors affecting helping relationships.

49. apply basic and advanced skills in helping processes, including empathic responding, self-disclosure, confrontation, process controls (e.g., goal-setting, beginning, ending, and terminating sessions, contracting), maintenance (e.g., external assignments, follow-up), and effectiveness evaluation.

CORE AREA IV: GROUPS

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

50. principles of group dynamics, including group process components, developmental state theories, and behavioral indicators.

51. group leadership styles and approaches, including characteristics of various types of group leaders and leadership styles and behavioral indicators.

52. theories of group counseling, including proponents, commonalities, distinguishing characteristics, pertinent research and literature, and behavioral manifestations.

53. group counseling methods, including group counselor orientations and behaviors, therapeutic ingredients, group members' roles and behaviors, ethical considerations, approach, selection criteria and methods, and methods of evaluating effectiveness.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

54. explain, in operational terms, states of group development, including factors affecting stage progression.

55. explain, in operational terms, group leadership styles.

56. explain, in operational terms, group counselor orientations to group counseling.

57. explain, in operational terms, group counselor verbal and nonverbal behaviors.

58. explain, in operational terms, group member verbal and nonverbal behaviors.

59. explain and self-evaluate group counseling skills.

60. apply group member selection criteria and procedures.

61. apply basic and advanced group counseling skills, including self-disclosures, empathic responses, confrontations, controls (e.g., beginning, ending, and terminating sessions, contracting), maintenance (e.g., external assignments, follow-up), and effectiveness evaluation.

CORE AREA V: LIFE STYLE AND CAREER DEVELOPMENT

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

62. major career development theories, including proponents, advantages and limitations, factors considered in application and behavioral manifestations.

63. occupational and educational information, including local and national sources, print media and computerized information systems, and interactive computer sources.

64. major career and leisure counseling, guidance and education theories, including proponents, advantages and limitations, factors considered in application, and behavioral manifestations.

65. basic and advanced career and leisure counseling, guidance, and education skills, including philosophic and theoretical bases, factors considered in application, behavioral manifestations, and methods of evaluation of effectiveness.

66. major theories of career and life style decision-making, including proponents, models, advantages and limitation, factors considered in application, and behavioral manifestations.

67. career development and counseling program planning, including major models, philosophic and theoretical bases, advantages and limitations, factors considered in implementation, and types and methods for evaluating program effectiveness.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

68. explain, in operational terms, major career development theories.

69. explain, in operational terms, occupational and education information systems.

70. explain, in operational terms, major career and leisure counseling, guidance, and education theories.

71. apply basic and advanced career counseling, guidance, and education skills, including facilitation of counselee self- exploration and evaluation, use of assessment instruments and techniques, integration of occupational and educational information, and evaluation of effectiveness.

72. apply principles of career development and counseling program planning in implementation and evaluation of program effectiveness.

CORE AREA VI: ASSESSMENT

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

73. types of educational and psychological assessment, including group and individual approaches to intelligence, aptitude, achievement, interest, and personality assessment, and similarities and differences among these approaches.

74. theoretical bases for assessment techniques and methods of interpreting assessment data and information.

75. validity, including methods for obtaining content, construct, predictive and concurrent evidence of validity.

76. reliability, including methods for estimating stability, internal, and equivalent types of reliability.

77. major assessment methods, including group and individual test and inventory methods, behavioral observations, and computer-managed and computer-assisted methods.

78. psychometric statistics, including types of test scores, measures of central tendency, indices of variability, standard errors, and correlations.

79. principles of assessment of data and interpretation of information in the helping processes.

80. ethical and legal considerations in the use of assessment data and information in helping processes.

USE RESPONSE FORM 3 FOR QUESTIONS 81 THROUGH 121

81. major resources for development, use, and evaluation of assessment instruments and techniques.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

82. explain, in operational terms, intelligence, aptitude, achievement, interest, and personality assessments.

83. explain, in operational terms, selection criteria for various types of assessment methods.

84. determine the validity of specific assessment methods in specific situations.

85. determine the reliability of specific assessment methods in specific situations.

86. select assessment methods appropriate to practical situations.

87. apply and interpret psychometric statistics in practical situations.

88. apply assessment interpretations in practical situations.

CORE AREA VII: RESEARCH AND EVALUATION

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

89. basic types of research, including historical, descriptive, developmental, case and field studies, correlational, causal-comparative, true experimental and quasi-experimental studies, and action research.

90. basic statistics, including types of data, distributional statistics, indices of variability, standard errors, relational statistics (e.g., simple, partial, and multiple correlation), comparison statistics (e.g., t-test, analysis of variance), and basic nonparametric statistics (e.g., chi-square).

91. principles of research proposal and report development, including report models, resources and guidelines.

92. principles of program evaluation, including development of objectives, assessment methods, and summative and formative approaches.

93. principles of needs-assessment methods.

94. practices in professional publication, including guidelines, sources of assistance, and ethical considerations.

95. ethical and legal considerations in research.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

96. explain, in operational terms, research types and approaches.

97. apply basic statistics in practical situations.

98. apply principles of research proposal development.

99. apply principles of program evaluation in practical situations.

100. apply principles of needs assessment methods in practical situations.

101. apply ethical and legal considerations in practical situations.

CORE AREA VIII: PROFESSIONAL ORIENTATION

How relevant is knowledge in the areas listed below to the work you do as a practicing counselor?

102. ethical standards, including their development, methods of changing standards and applications to various professional activities.

103. professional roles and functions, including similarities to and differences with other types of professionals.

104. professional organizations, including membership benefits, activities, services to members, and current emphases.

105. history of the helping professions, including significant factors and events influencing the evolution of the helping professions.

106. professional preparation standards, including their development and current applications.

107. professional credentialing, including certification, licensure, and accreditation practices, standards, and activities.

How relevant to the work you do as a practicing counselor is knowledge of the skills described below?

108. apply professional ethical standards in practical situations.

109. explain, in operational terms, varying professional roles and functions, and their professional interrelationships.

110. explain, in operational terms, professional organization roles and activities.

111. apply aspects of the history of the helping professions to current professional roles, functions, and conditions.

112. explain, in operational terms, the relationship between professional preparation standards and current professional roles and functions.

113. characterize, in operational terms, the various forms of professional credentialing applicable in the helping professions.

114. *Having reviewed the content areas covered on the NBCC Examination, please answer the following question now:* How relevant to the work you do as a practicing counselor was the knowledge tested on the entire NBCC Examination, taken as a whole?

In order to determine whether counselors with different backgrounds or in different specialities have differing views on the relevance of the topics assessed by the NBCC Examination, we must ask you a few questions about your background and specialty. The information you provide will be held in strict confidence and will be used only for purposes of data analysis.

FOR QUESTIONS 115 THROUGH 118: DARKEN THE BUBBLE IN COLUMN A THROUGH E OF RESPONSE FORM 3 THAT CORRESPONDS TO YOUR ANSWER.

115. Which category best describes the college or university major which prepared you for work as a counselor? MARK THE ONE CATEGORY THAT BEST DESCRIBES YOUR HIGHEST LEVEL DEGREE OR CERTIFICATE.

A. Counseling
B. Psychology
C. Social Work
D. Education
E. Other

116. How would you classify the specialty in which you currently are practicing? PLEASE DARKEN THE BUBBLE THAT CORRESPONDS TO **EACH** SPECIALITY THAT APPLIES TO YOU.

A. School
B. Agency/Institution
C. Community/Private
D. Higher Education
E. Other

TREAT QUESTIONS 117 AND 118 AS A SINGLE QUESTION.

117. Would you classify yourself as a member of any of the following racial or ethnic groups? DARKEN ONLY ONE BUBBLE.

A. White, non-Hispanic (Skip to Question 119)
B. Black (Skip to Question 119)
C. Puerto Rican/Mexican-American, Hispanic (Skip to Question 119)
D. American Indian (Skip to Question 119)
E. None of the above (Go to Question 118)

118. Would you classify yourself as a member of any of the following racial or ethnic groups? DARKEN ONLY ONE BUBBLE.

A. Oriental/Asian-American
B. Other than a group listed in Question 117 or 118A
C. (I darkened a bubble in Question 117)

Because counselors' judgments of the relevance of various topics on the NBCC Examination might depend on their general feelings about their role as a counselor, we would like you to respond to three questions concerning your satisfaction with counseling as a profession. Unlike the alternative- response questions you have answered above, we will ask you to provide short, written responses to the following three questions.

On the BACK OF RESPONSE FORM 3 you will find three bordered areas marked "WRITE-IN AREA 1," "WRITE-IN AREA 2,"and "WRITE-IN AREA 3." Please write or print your answers to Questions 119 through 121 WITHIN THESE AREAS. If you need additional space, please enclose additional sheets, with the number of the pertinent question clearly marked.

119. *PLEASE WRITE OR PRINT YOUR ANSWER TO THIS QUESTION INSIDE WRITE-IN AREA 1 ON THE BACK OF RESPONSE FORM 3. (Enclose additional sheets if you need more space.)*

Please describe your level of satisfaction with your choice of counseling as a profession.

120. *PLEASE WRITE OR PRINT YOUR ANSWER TO THIS QUESTION INSIDE WRITE-IN AREA 2 ON THE BACK OF RESPONSE FORM 3. (Enclose additional sheets if you need more space.)*

What is the most satisfying aspect of your work as a counselor; i.e., what gives you the greatest satisfaction?

121. *PLEASE WRITE OR PRINT YOUR ANSWER TO THIS QUESTION INSIDE WRITE-IN AREA 3 ON THE BACK OF RESPONSE FORM 3. (Enclose additional sheets if you need more space.)*

What is the least satisfying aspect of your work as a counselor; i.e., what gives you the least satisfaction?

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY

RETURN ONLY YOUR THREE RESPONSE FORMS IN THE ENCLOSED, STAMPED ENVELOPE TO:

NBCC Survey
Center for Educational Research and Evaluation
University of North Carolina
Greensboro, NC 27412-5001

ID NUMBER: 736

SPECIAL CODES: A B C D E F G H I J — 04

GENERAL PURPOSE DATA SHEET II

form no. 19542

NATIONAL BOARD FOR CERTIFIED COUNSELORS

NATIONAL CERTIFIED COUNSELORS SURVEY

XXXXX

RESPONSE FORM 1

USE NO. 2 PENCIL ONLY

DON'T KNOW	
NOT RELEVANT to practice	
of QUESTIONABLE relevance	
IMPORTANT to practice	
CRUCIAL to practice	A

1. Relevance of the entire NBCC examination, as a whole
2. Relevance of life-span theories of human development
3. Relevance of self-concept development and evolution
4. Relevance of personality development and evolution
5. Relevance of normal and abnormal human behavior
6. Relevance of learning theories, applications, and indicators
7. Relevance of knowing how to explain psychological development
8. Relevance of knowing how to apply life-span theories of development
9. Relevance of knowing how to explain self-concept
10. Relevance of knowing how to apply self-concept theories
11. Relevance of knowing how to characterize personality
12. Relevance of knowing how to apply personality theories
13. Relevance of knowing how to identify and explain abnormal behavior
14. Relevance of knowing how to apply major learning theories
15. Relevance of trends and changes of society
16. Relevance of trends and changes in human roles
17. Relevance of marital/family situations and trends
18. Relevance of multicultural trends and conflict resolution
19. Relevance of human sexuality and facilitating sexual adjustment
20. Relevance of major societal concerns and methods for alleviating these concerns
21. Relevance of knowing how to explain the impact of major societal trends
22. Relevance of knowing how to apply principles of helping relationships
23. Relevance of knowing how to explain the nature of human roles
24. Relevance of knowing how to apply helping relationships to roles and adjustments
25. Relevance of knowing how to explain marital/familial intervention patterns
26. Relevance of knowing how to apply helping relationships to marital/familiar situations
27. Relevance of knowing how to explain behaviors of subgroups and subgroup members
28. Relevance of knowing how to apply helping relationships to subgroups and society
29. Relevance of knowing how to explain factors influencing sexual adjustment
30. Relevance of knowing how to apply helping relationships for sexual adjustment
31. Relevance of knowing how to explain causes and results of stress
32. Relevance of knowing how to apply helping relationships to stress reduction
33. Relevance of knowing how to explain factors influencing/causing person abuse
34. Relevance of knowing how to apply helping relationships to eliminate person abuse
35. Relevance of knowing how to explain factors influencing/causing substance abuse
36. Relevance of knowing how to apply helping relationships to eliminate substance abuse
37. Relevance of knowing how to explain factors influencing discrimination
38. Relevance of knowing how to apply helping relationships to eliminate discrimination
39. Relevance of knowing characteristics that influence helping processes
40. Relevance of knowing client characteristics that influence helping processes

WRITE-IN AREA 1

BEST COPY AVAILABLE

DO NOT MARK IN THIS SHADED AREA

WRITE-IN AREA 2

WRITE-IN AREA 3

1	A	B	C	D	E
2	A	B	C	D	E
3	A	B	C	D	E

DO NOT MARK

IN THIS

SHADED AREA

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NATIONAL BOARD FOR CERTIFIED COUNSELORS
NATIONAL CERTIFIED COUNSELORS SURVEY

XXXXX

RESPONSE FORM 2

ID NUMBER	SPECIAL CODES
736	A: 04

USE NO. 2 PENCIL ONLY

	A	B	C	D	E
	CRUCIAL to practice	IMPORTANT to practice	of QUESTIONABLE relevance	NOT RELEVANT to practice	DON'T KNOW
41. Relevance of knowing factors, other than participants, that influence helping processes	A	B	C	D	E
42. Relevance of knowing counseling and consultation theories	A	B	C	D	E
43. Relevance of knowing basic and advanced helping skills	A	B	C	D	E
44. Relevance of knowing about the implementation of helping processes	A	B	C	D	E
45. Relevance of knowing how to explain counselor orientations to helping processes	A	B	C	D	E
46. Relevance of knowing how to explain counselor behaviors in helping processes	A	B	C	D	E
47. Relevance of knowing how to explain and calculate levels of helping skills	A	B	C	D	E
48. Relevance of knowing how to explain factors affecting helping relationships	A	B	C	D	E
49. Relevance of knowing how to apply skills in helping processes	A	B	C	D	E
50. Relevance of knowing principles of group dynamics	A	B	C	D	E
51. Relevance of knowing group leadership styles and approaches	A	B	C	D	E
52. Relevance of knowing theories of group counseling	A	B	C	D	E
53. Relevance of knowing group counseling methods	A	B	C	D	E
54. Relevance of knowing how to explain states of group development	A	B	C	D	E
55. Relevance of knowing how to explain group leadership styles	A	B	C	D	E
56. Relevance of knowing how to explain group counselor orientations to group counseling	A	B	C	D	E
57. Relevance of knowing how to explain group counselor behaviors	A	B	C	D	E
58. Relevance of knowing how to explain group members' behavior	A	B	C	D	E
59. Relevance of knowing how to explain and evaluate group counseling skills	A	B	C	D	E
60. Relevance of knowing how to apply group member selection criteria and procedures	A	B	C	D	E
61. Relevance of knowing how to apply group counseling skills	A	B	C	D	E
62. Relevance of knowing major career development theories	A	B	C	D	E
63. Relevance of knowing occupational and educational information	A	B	C	D	E
64. Relevance of knowing about career and leisure counseling, guidance, and education theories	A	B	C	D	E
65. Relevance of knowing about career and leisure counseling, guidance, and education skills	A	B	C	D	E
66. Relevance of knowing theories of career and life style decision-making	A	B	C	D	E
67. Relevance of knowing about career development & counseling program planning	A	B	C	D	E
68. Relevance of knowing how to explain major career development theories	A	B	C	D	E
69. Relevance of knowing how to explain occupational & educational information systems	A	B	C	D	E
70. Relevance of knowing how to explain career & lei.. e theories	A	B	C	D	E
71. Relevance of knowing how to apply basic & advanced career counseling, guidance, & edu skills	A	B	C	D	E
72. Relevance of knowing how to apply principles of career development & counseling in program dev	A	B	C	D	E
73. Relevance of knowing educational and psychological assessment	A	B	C	D	E
74. Relevance of knowing theoretical bases for assessment & interpretation of information	A	B	C	D	E
75. Relevance of knowing validation types & methods	A	B	C	D	E
76. Relevance of knowing reliability & estimation methods	A	B	C	D	E
77. Relevance of knowing major assessment methods	A	B	C	D	E
78. Relevance of knowing psychometric statistics	A	B	C	D	E
79. Relevance of knowing principles of data assessment & information interpretations	A	B	C	D	E
80. Relevance of knowing about ethical & legal considerations in assessment & interpretation	A	B	C	D	E

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ID NUMBER	SPECIAL CODES
736	04

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NATIONAL CERTIFIED COUNSELORS SURVEY

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RESPONSE FORM 3

USE NO. 2 PENCIL ONLY

A	B	C	D	E
CRUCIAL to practice	IMPORTANT to practice	of QUESTIONABLE relevance	NOT RELEVANT to practice	DON'T KNOW

81. Relevance of knowing about resources for development and use of assessment instruments
82. Relevance of knowing how to explain intelligence, aptitude, achievement
83. Relevance of knowing how to explain selection criteria for assessment methods
84. Relevance of knowing how to determine validity of specific assessment methods
85. Relevance of knowing how to apply reliability considerations
86. Relevance of knowing how to select assessment methods appropriate to practical situations
87. Relevance of knowing how to apply & interpret psychometric statistics
88. Relevance of knowing how to apply assessment interpretations
89. Relevance of knowing types of research
90. Relevance of knowing basic statistics
91. Relevance of knowing principles of research proposal, report development
92. Relevance of knowing principles of program evaluation
93. Relevance of knowing principles of needs-assessment methods
94. Relevance of knowing professional publication practices
95. Relevance of knowing ethical, legal considerations in research
96. Relevance of knowing how to explain research types, approaches
97. Relevance of knowing how to apply basic statistics
98. Relevance of knowing how to develop research proposals
99. Relevance of knowing how to apply principles of program evaluation
100. Relevance of knowing how to apply principles of needs assessment
101. Relevance of knowing how to apply ethical, legal considerations in practice
102. Relevance of knowing ethical standards, their development, change, application
103. Relevance of knowing professional roles and functions
104. Relevance of knowing about professional organizations
105. Relevance of knowing the history of the helping professions
106. Relevance of knowing professional preparation standards
107. Relevance of knowing about professional credentialing
108. Relevance of knowing how to apply ethical standards in practice
109. Relevance of knowing how to explain professional roles, functions
110. Relevance of knowing how to explain professional organization roles, functions
111. Relevance of knowing how to apply aspects of history of the helping professions
112. Relevance of knowing how to explain relationship between standards and roles
113. Relevance of knowing how to characterize professional credentialing
114. Relevance of entire NBCC examination, as a whole

DEMOGRAPHIC DATA

115. College or University major
116. Specialty area of practice
117. Racial or ethnic group
118. Racial or ethnic group

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